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SOUTH'S MINERAL OUTPUT.

Of the total value, \$2,186,086,366, of the production of raw mineral material and certain derivatives in the United States in 1906, an increase of \$332,212,211, or at the rate of 17.9 per cent. over 1905, the production in the South represented \$301,694,582, an increase of \$54,032,295, or at the rate of 21.8 per cent. The increases by separate States are shown in the following table:

States.	1905.	1906.
Alabama.....	\$53,585,288	\$65,046,153
Arkansas.....	4,483,137	4,933,899
Florida.....	4,828,783	6,395,825
Georgia.....	6,597,215	8,927,361
Kentucky.....	15,771,811	18,758,897
Louisiana.....	6,815,430	10,334,030
Maryland.....	20,948,257	22,939,894
Mississippi.....	874,279	954,559
North Carolina.....	2,486,063	3,062,847
South Carolina.....	2,494,457	2,800,108
Tennessee.....	19,441,859	27,444,570
Texas.....	13,752,346	14,751,037
Virginia.....	21,751,986	24,650,814
West Virginia.....	74,731,376	90,694,588
Total.....	\$247,662,287	\$301,694,582
Total U. S.....	1,853,874,155	2,186,086,366

In the value of the production West Virginia led with \$90,694,588, Alabama being second with \$65,046,153, Tennessee third with \$27,444,570, Virginia fourth with \$24,650,814, Maryland fifth with \$22,939,894 and Kentucky sixth with \$18,758,897. Tennessee moved from fifth place in 1905 to third place in 1906, and Maryland's movement was exactly the reverse. Of several raw materials, coal was the leader in Alabama, Arkansas, Kentucky, Maryland, Tennessee, Virginia and West Virginia; phosphate rock in Florida and South Carolina; stone in Georgia and North Carolina; sulphur in Louisiana and petroleum in Texas. Of the immediate derivatives, pig-iron was the leader in Alabama,

Maryland, Tennessee and Virginia; clay products in Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Texas. It is interesting to note that the value of the natural gas produced in West Virginia, \$13,735,343, was only about \$2,435,000 less than the value of the petroleum output of that State.

In the whole country as to the raw materials and immediate derivatives, Pennsylvania led with a value of \$657,413,780, more than twice the total value for the total South and more than 30 per cent. of the country's total; Ohio was second with \$209,976,930, Illinois third with \$121,188,306, Michigan fourth with \$104,424,548, New York fifth with \$92,870,905, and West Virginia sixth with \$90,694,588.

These figures are derived from a summary of the mineral production of the United States in 1906 compiled in the Geological Survey by Dr. Wm. Taylor Thom, who points out that the total include certain derivative materials, such as pig-iron, pig lead, lead paints, clay products, coke, illuminating gas, coal tar, etc., in their first marketable condition, there being a difference of \$283,568,801 between the total value of the raw materials and the total value, including derivatives.

TO PROMOTE COMMERCE.

Individuals, organizations and newspapers who were active in inducing legislation for the creation of what became the Department of Commerce and Labor are justified by the evolution of the department in hoping that the conference called by Secretary Straus looking to the furtherance of American trade and commerce will promptly recommend as the surest means of such promotion legislation for the abolition of the Department of Commerce and Labor. The different bureaus concerned with trade and commerce are doing practically nothing more than they did before they were absorbed from other departments of the Government, if indeed as much, and their absorption into the Department of Commerce and Labor has been accompanied by developments in that department beyond the most frenzied dreams of anybody among the original advocates of its establishment.

A SPLENDID RECORD.

No one familiar with the splendid work which has been done during the last two years by the people who during that period owned the Tennessee Coal, Iron & Railroad Co. can but regret that the financial conditions have been such that they did not reap the full fruition of their wise investment and splendid work for Alabama's advancement. Under the leadership of President Topping and his associates in ownership, and the staff which he gathered around him, the properties of the Tennessee Company have been wisely developed and put in better shape than ever before. Not only have the coal

and ore mines been so handled as to largely increase their output, but furnaces have been rebuilt, the steel-rail mill practically reconstructed and greatly enlarged, so that it stands today as a splendid monument to the work of these people. In a district in which there have been in times past entirely too many factions and too much jealousy among iron companies, President Topping and the people that he has gathered around him have made friends with everybody instead of enemies, and have been strong factors in every good work looking to the betterment of all business and labor conditions in and around Birmingham. It is to be hoped that the new management will recognize and appreciate this work and continue the policy which has been pursued to such excellent advantage as that which has marked the course of the Tennessee's officers during the last two years.

IMMIGRATION BLUFFS.

Southerners desirous of attracting to their part of the country immigrants who will become productive and in all respects desirable citizens should view with equanimity, but with caution, reports published in this country of action alleged to have been taken by foreign Governments in the matter of immigration to this country. There is the biggest kind of game going on, with the South expected to be the chief pawn, for the benefit principally of certain transatlantic steamship companies working in understanding with certain foreign Governments not at all adverse to speeding divers elements of their population away from their boundaries. Quite a favorite device is that designed to create an impression that these Governments are resisting the emigration of their population to the South, on the theory that belief in such fairy tales will lead the South to think that emigrants assisted from their native lands by their own Government or by other agencies will be desirable additions to the population of the South. It should be enough warning for the South to know that the fairy tales usually come to light on this side of the water coincidently with the growth of an inclination on the part of the South to object to being "worked" for the benefit of self-seeking individuals or organizations. About the latest manifestation in this respect deals with an alleged warning issued by the "Government" at Vienna against "agents who at present are so busy inducing Austrian and Hungarian emigration to the Southern States of America." If the warning has been really issued it might be well for officials of the Southern States, instead of falling in with the scheme of the recently-organized "division of information" of the Federal immigration bureau to regulate the labor supply of the country, to insist upon that bureau's discovering whether the inducements alleged to be offered Austrian and Hungarian emigrants are in violation of our

immigration laws and to act accordingly.

THE STEEL CORPORATION AND ALABAMA.

All that the MANUFACTURERS' RECORD has for years been claiming about the iron and steel making potentialities of the South has now received the highest endorsement which the world could give. The purchase of the Tennessee Coal, Iron & Railroad Co. by the United States Steel Corporation is the strongest testimony which the foremost financiers and steelmakers of the world could pay to resources of Alabama. And now that the purchase has been made there are two good economic reasons which would compel the full development of that situation even if the Steel Corporation were not disposed to do so. In the first place, the advantages of Alabama for steel-making are so great that this alone would force the fullest utilization of this opportunity. In the second place, the Steel Corporation, which has ever been very careful to avoid any just cause for public criticism, would not dare in these days of agitation to do anything which would provoke such hostility as would be created by failure on its part to continue on a broad scale the full development of the Alabama properties which it now owns. These two reasons, either one of which would be final and conclusive, make certain that the Steel Corporation will continue the work of enlargement of the Tennessee Company's plant in Birmingham, and that this will be carried out as soon as business conditions justify on a scale of sufficient magnitude to make that section one of the world's great steel-producing centers. Moreover, the entrance of this corporation into the Alabama field must stir up the large independent companies to follow suit. There are many other big concerns which are short on Lake Superior ores as compared with their future needs, and they, too, can find in Alabama opportunities which they can no more afford to miss than the Steel Corporation could afford to miss securing its great bargain.

As the predictions of the MANUFACTURERS' RECORD as to steel and iron are thus finding their full development, so will its predictions as to other phases of the South's potentialities be realized. For 25 years it has been presenting to the world the story of the South's resources. At times its statements have been regarded by some as visionary. In days gone Eastern ironmakers ridiculed its claims for the South's iron resources; later they claimed that even if it could make pig-iron it could never become a steel producer. New England people long derided the claims for the South's cotton-manufacturing advantages, and even after its mills had captured the coarse goods trade they honestly believed that it could not produce fine goods. Once Eastern ports proved to their own satisfaction that grain could never be successfully exported through Gulf ports, claiming that it

would be ruined by heat. And so the story runs. Every claim of the MANUFACTURERS' RECORD is being verified from day to day, and the future holds in store a development of which we can now only dimly see the beginning.

PAYING THE PIPER.

The whole State of Alabama is aroused to action against the spirit which has dominated the politics of the State in the ceaseless fight against the railroads. The business men of the State are holding public meetings and appealing to the Legislature to stop this agitation and not to pass new laws against the railroads. In doing this they are wise, but it is the old story of "locking the stable after the horse has been stolen." The business men of Alabama were fully warned of the ruin which would follow the policy of anti-railroad legislation. It required no foresight for them to know that it meant a halt in railroad building; that it meant the driving away from the State of the capital so much needed for the enlargement of railroad facilities; that it meant to many of them financial ruin, and yet, disregarding these conditions, they sat supinely by and permitted the agitators to carry on their campaign of ruin. Had they taken the same interest in preventing the enactment of these laws as they are now taking to induce the Legislature not to carry on its drastic agitation Alabama might have been saved from this period of suffering. But though duty long neglected is bringing its inevitable woe, it is well that the people have at last fully awakened to the situation. It is not simply that the merchant and the manufacturer and the mining operator will suffer, but every interest in the State must inevitably suffer from the same conditions.

To the spirit of denunciation, of bitter vindictive hostility to railroads, is due very much of the present situation in the financial and business world. The cotton-grower, who was taught to believe that agitation against railroads and corporations would be to his benefit, is now forced to realize that the decline in cotton, brought about by these conditions, already means a loss of over \$100,000,000 to the planters of the South as compared with the price which they would have received but for this situation. The day laborers and the mechanics, the miners and all other men who but a few months ago found the employers hunting for them and paying wages such as had never been received before are compelled to contrast that happy condition with the present situation, where thousands of them are already seeking in vain for work.

Surely there are some public men in the South of sufficient strength of character to see the mistakes which have been made and to come out squarely before the public and admit them and appeal to the Legislature to correct them. The wise man changes, the fool never, and there must be among the leaders in Southern politics some wise men who are willing, in the light of the present situation, to say, "I recognize that I have honestly made a mistake; I recognize that the agitation which I have helped to foment is resulting in the loss of employment by thousands of men, in the inability of the farmers to sell their products to advantage, and, recognizing this, I am willing to stand before the world and say so, willing to appeal to the Legislature to take such action as to show

that in this State at least we have abandoned the fight against railroads and corporations, and are ready to stand shoulder to shoulder in helping them to meet the condition, guaranteeing to them every constitutional right in the protection of their interests, whether that right be the right of appealing to State or to Federal courts." If there be such a man in the South who at this critical moment will take such a lead, not only the people of his own State, but millions throughout the land, will rise up and bless his name, for he will help to turn the tide and give confidence anew to the public. Here is an opportunity such as has been vouchsafed to few people in all the history of this country. Who will be great enough to measure up to the opportunity?

TO BENEFIT EMPLOYEES.

Authorities at Washington ought to send post haste some secret-service agent to investigate a plan which is being considered by representatives of the larger lumber companies of Arkansas and Louisiana who are seeking to co-operate with one another for the benefit of their employees and families to the number of about 100,000. According to the *St. Louis Republic*, the companies cutting yellow-pine lumber propose, in order to obviate the necessity of closing down their mills and camps and throwing thousands of men out of work during November and December, to submit to their men a means whereby they will be retained at work and provided with the necessities of life until the car shortage is relieved and the financial depression is over. The lumber companies' idea is to pay this month their October wages in the companies' personal checks, which will be honored for supplies at the companies' stores, or where such stores do not exist, at some place with commissary departments selected by the corporations and, if the October checks amount to more than the present needs of any employee, they will be credited with the balance on the books of the company. For November and December it is designed to provide the employees and their families with groceries, clothing, fuel and house rent in exchange for their labor, the wages to be charged against a daily "living account." It is pointed out in the *Republic* that, though the working out of the plan will necessitate an interrupted operation of sawmills and a curtailment in the gross amount of wages, it will retain the men in employment with no fear of hardship and will enable the companies to hold their men until currency is more plentiful and the mills can be placed in full operation.

Such a plan is no novelty in principle, and should it be accepted by the employees of the lumber companies, its practical working out to the satisfaction of everybody concerned will be watched with interest, especially as an indication of the interest of Southern employers in the welfare of their employees and their families.

INVESTIGATING THE SOUTH.

In special correspondence from Washington to the *Charleston (S. C.) News and Courier*, Mr. D. A. Tompkins of Charlotte, N. C., is quoted as follows in connection with highly-colored stories of mill conditions in the South:

One of my friends in Washington, a man high up in politics and power, told me that he heard that we covered up the real workings and conditions at our mills from the public, and he was very much surprised when I said he was mistaken and that, on the contrary, the mills throughout the South

were open to the public all the time. He asked me if he selected someone to send down South to investigate the situation and write a true account of it would I lend my aid, and I said that I would be very glad to do so. He selected this person and sent her South with the instruction that he wanted her to make a thorough investigation of the mills and the working thereof, and write a full and accurate account of the situation and especially of the child-labor question. The person was shown around and given as much assistance as possible, and returned to Washington with her notes and wrote the story. When she handed it in it was refused, the reason being that it set forth the condition of affairs in too good a light, yet it was true.

Students of the oratory and literature of the "child-labor" campaign, those who are able to trace the origin and evolution of the campaign itself and of the sudden emergence into notoriety as "experts" of many of the leaders in it, know that investigations in that field, whether promoted from Washington, or from New York, or from Boston, can hardly be expected in reason to develop very full light upon the subject. As to presenting conditions "in too good a light," such a thing is preposterous. Who ever heard of any party politician advising his henchmen to throw a good light upon the other party? Who ever heard of a genuine sociologist able to recognize any fact about conditions in human society except that which he can use as an excuse for drawing the salary paid him as an expert? And when a sociologist is of about the mental size of a pot-house politician, what benefit to humanity is to be expected from his investigations? There is more than one such at large in the country today.

THE INLAND WATERWAY.

The call for the second Rivers and Harbors Congress at Washington in December, designed to develop a public opinion in favor of liberal Federal provisions for the improvement of waterways generally, is bringing to the front a number of practicable projects for the development of water transportation in this country, not the least of which is the proposed inland waterway extending practically from Massachusetts bay to the Rio Grande river. Last week business men met at Wilmington and organized a North Carolina branch of the congress and heartily endorsed the scheme for the canal connecting Hampton Roads and Beaufort Inlet. In the same week the people of Louisiana and Texas were interested in the Houston meeting of the association that is promoting the construction of links in the waterway to extend from the Rio Grande to the Mississippi. It is not impossible that other links in Alabama may be considered at the meeting called for next week at Birmingham, while a conference to organize sentiment on the Atlantic coast for deeper waterways, to be held at Philadelphia next week, will consider such links as the Delaware and Raritan canal in New Jersey and the Chesapeake and Delaware canal in Maryland and Delaware.

Considering how great a portion of the proposed inland waterway has been already laid out by Nature in the shape of Long Island Sound, Delaware and Chesapeake bays, the Mississippi sound, inlets and canals, it should not be difficult to assemble a strong and effective public opinion embracing the whole stretch of country, including 15 seaboard and Gulf States to be benefited, in favor of the project and to make such opinion to take active form in congressional action. The commercial advantages of this inland waterway, tapping, as it would, so many natural arteries of

commerce, can hardly be estimated. In addition it would be incomparable as a means of defense in case of war. Moreover, canalization and the deepening of existing waterways would contribute much toward solving the problem of drainage in portions of some of the States. The perfectly proper active participation by the Federal Government in the construction of a waterway would, indeed, in this particular lessen the excuse for the demand that the Government go into drainage projects by the wholesale. The canals for the waterway constructed under Government auspices might readily become the bases for drainage undertakings under the auspices of individual States.

THE PRICE OF PAPER.

Before the President urges upon Congress the necessity of abolishing the tariff on wood-pulp and on wood imported into this country for the manufacture of wood-pulp and paper, it might be well for him to learn whether or not the interests that control the International Paper Company do not also control the sources of cheap Canadian wood-pulp and whether or not they are not really the ones to be most benefited by a removal of the duty on wood-pulp. If the control of the International Paper Company and of Canadian wood-pulp sources are identical, it is safe to say that removal of the duty would not necessarily reduce the price of paper, but would add millions of dollars to the wealth of citizens of the United States who own Canadian timber. The inside history of Hawaiian annexation, of the war with Spain and the consequent present situation in Cuba and the Philippines, of the Porto Rican tariff episode and of a certain group of reciprocity treaties which were never ratified, as well as of certain economic and industrial legislation at the last session of Congress will indicate how easily enthusiastic observers of the superficial may be induced to support legislation which they believe is for their benefit, but which really is inspired by the very influences that they would combat. Cheap-priced paper is very desirable, but it is hardly likely to be had through reducing the tariff on material for paper-making, no more than the annexation of Hawaii or of Cuba could reduce the price of sugar, for instance.

THE FAITH THAT IS IN US.

A correspondent in New York of the MANUFACTURERS' RECORD, referring to a gentleman there who had read the pamphlet reproductions of recent editorials in this paper writes:

He called up and said that he had just read the editorials and wanted an extra copy. He thinks recent optimistic editorials are doing an incalculable amount of good, and wishes that every man, young and old, could be made to read them. He said we were on the right track and every other paper in the country should follow. He had seen a number of people, all of whom were talking about the MANUFACTURERS' RECORD editorials, and only yesterday he was talking to a banker who agreed with him that the MANUFACTURERS' RECORD was the greatest industrial paper in the country.

This is in line with other letters received by the MANUFACTURERS' RECORD. Mr. W. P. D. Moross, general manager the Chickamauga Cement Co., Chattanooga, Tenn., writes:

Permit us to commend and congratulate you on the happy tone of your recent editorials, and likewise the sentiments expressed in your letter of November 5. Just at present we are sorry to say that an advertising proposition would not interest us, for the simple reason that our business is so overwhelmingly large that we are driven to

enlarge our capacity to keep ahead, and at present, with the usual car shortage upon us, we dislike to ask for more, when we are pressed to our utmost to meet the requirements of our customers in a satisfactory manner. Right here permit us to say that our business extends throughout the South and in some portions of the Eastern and Middle States, and with very few exceptions have we noticed anything that would indicate the slightest cessation in the demand for our products. Many of our customers are arranging now for their supplies for the coming year. There is plenty of prosperity—large chunks of it—lying all over the South, and we think our people pretty nearly realize it. We think you will find the happy tone of your recent editorials will have ample ground for the strongest sort of verification when the history of 1908 is written.

A. C. Stansill, Machinery Agent, Roanoke, Va., writes:

You are doing a work for the South which no one else has even attempted, inasmuch as you get in personal touch with your subscribers, and your three recent editorials, "The Sun Still Shines," "The Clouds Will Roll By" and "Forward," strike the note of optimism which everyone interested in Southern progress should be glad to repeat.

Mr. J. Scott Parrish, assistant treasurer Richmond Cedar Works, Richmond, Va., writes:

In our opinion, the press, especially the daily press, can do the country now the greatest service by printing good solid news and throttling the calamity-howlers.

Mr. P. H. Norcross of the Solomon-Norcross Company, Atlanta, Ga., writes:

The Solomon-Norcross Company believes that the situation is bound to improve, due to our ability as a nation in general, and especially to conditions existing in our united South. We are going ahead working up new propositions, as we do when money is more plentiful, and we have every confidence that ere long things will be in a much better condition than ever before.

John F. Rudisill, secretary B. M. Root Company, York, Pa., writes:

Will you please send us at your earliest convenience 100 copies of the three editorials which you have published in pamphlet form. We have so very many inquiries which seem favorable, but our customers seem to be timid about closing the contract. We have decided to offer a number of these an additional 5 per cent. from the price if orders are closed before December 1, and enclose them copy of your editorials as an evidence of the coming prosperity. We believe we can close some nice contracts through the use of this pamphlet which you have issued.

SOUTHERN CLAY PRODUCTS.

The value of the products of clay-working industries of the United States in 1906 was \$161,032,722, of which the South produced to the value of \$21,744,133. The production by Southern States was as follows:

States.	Value.
Alabama.....	\$1,688,899
Arkansas.....	532,194
Florida.....	289,644
Georgia.....	2,400,624
Kentucky.....	2,592,423
Louisiana.....	900,897
Maryland.....	2,136,539
Mississippi.....	851,080
North Carolina.....	1,182,338
South Carolina.....	830,481
Tennessee.....	1,620,226
Texas.....	1,969,598
Virginia.....	1,966,078
West Virginia.....	2,783,312
Total.....	\$21,744,133

The working of clay products into brick and tile, pottery, etc., in the South is still an infant industry. In spite of the vast clay resources of that section the total value of its products last year was just about one-eighth of the total value for the whole country and \$9,000,000 less than the total value of Ohio's products.

ATTRACTING INDUSTRIES.

In the territory adjacent to the Southern Railway and the Mobile & Ohio Railroad, according to figures compiled by Mr. M. V. Richards, land and industrial agent of the lines, 989 new industries with a capital of \$54,726,000 were put into operation during the 12 months ended June 30,

220 industries invested \$11,331,300 in important additions and 90 industries with a capital of \$7,129,500 were under construction. Moreover, new buildings, street improvements, street railways, water and light plants in cities and towns of the territory represent an expenditure during the year of \$58,430,885—a total investment of \$135,268,785. Of the total investments in new industries, \$4,084,000 went into the textile industry, \$1,117,000 into cottonseed-oil mills, \$4,155,000 into iron industry, \$5,179,300 into lumber mills, \$1,152,500 into furniture factories, \$1,900,500 into miscellaneous woodworking plants, \$1,375,100 into brick plants and \$618,000 into fertilizer factories.

THE TEXAS SPIRIT.

Illustrative of the spirit which is making Texas one of the greatest Commonwealths of the world is a full-page address to the merchants of Texas and adjoining territories signed by more than fifty jobbers of Dallas and published in the *Nexas* of that city. The address is as follows:

"The financial situation in the East has created a condition in the commercial interests of the South without parallel in the history of this country. Notwithstanding the solvency and soundness of our institutions, the temporary suspension of currency shipments from chief financial centers has locked the wheels of commerce and brought about a waiting condition.

"We fell confident, however, that because of the large influx of gold from Europe and the temporary use of credit currency, the conditions that now impede the transaction of business will shortly be removed.

"Texas and Oklahoma, as you know, have diligently attended to their own legitimate business, comparatively free from speculation, and it is only a question of time when we shall have more ready cash in these States than we ever had before.

"In the first place, the conditions in the East are gradually improving, and we will soon have a flow of gold and currency in this direction; and in the second place, this flow can be accelerated by marketing our products at as early a day as possible consistent with legitimate prices. In this way large sums of money will be brought into these States, dormant money will be instantly put into circulation and the commercial and other interests of this section will be as bright as they ever were in ordinary circumstances at this season of the year.

"Here is the foundation of our confidence in the solidity of Texas, predicated upon the unsold harvests of 1907:

Cotton.....	\$112,000,000
Cotton products.....	30,000,000
Cattle and hogs.....	100,000,000
Corn.....	50,000,000
Hay.....	50,000,000
Rice and sugar.....	20,000,000
Sundries.....	38,000,000

Total.....\$400,000,000

Also lumber, petroleum and petroleum products, etc., aggregating about \$50,000,000.

"Such, in brief, is the story of the year's unsold output.

"Four hundred and fifty million dollars to the credit of the State; to the debit of the rest of the world—a debit which will soon be paid in good sound cash, since the world must be supplied with the necessities of life.

"Texas was prosperous before the financial flurry, and Texas is solvent and prosperous today. Its prosperity is based not upon stocks or bonds with fictitious values, but upon actual products in hand, and is a prosperity which must be enduring.

"There is every reason why patience, prudence, common sense and cheerfulness should prevail.

"The situation here, as we see it today,

surely warrants the largest possible confidence.

"Texas was and is sound, healthy and prosperous.

"Instead of finding fault with temporary inconveniences, let us all heartily co-operate for the common good by promoting that confidence everywhere which is so absolutely essential to national prosperity."

The foundation of confidence in the solidity of Texas is but a part of the foundation of confidence in the solidity of the South, and consequently of the solidity of the whole country. Facts of the kind should be brought to the front everywhere and kept there.

A SOUTHERN MAN AS PRESIDENT OF THE TENNESSEE COAL, IRON & RAILROAD CO.

Mr. George L. Crawford has been elected president of the Tennessee Coal, Iron & Railroad Co. Mr. Crawford has been one of the important officials of the Steel Corporation, located now at McKeesport, and has been called from that position to the presidency of the Tennessee. He is a Southern man, having been born in Madison, Ga., and for a few months some years ago lived in Birmingham, at that time being in the employment of the Sloss Iron Co. He is, therefore, familiar with the Birmingham conditions; familiar with the operations of the Steel Corporation both in furnace practice and in finished product, and has recently made for the Steel Corporation an investigation of coke-making in Europe. Mr. Crawford has also had exceptional opportunities for studying iron and steel-making conditions in Europe. He comes to the Southern field, therefore, with a very broad knowledge of the best coke and iron and steel practice not only in this country, but abroad. In assuming the management of the Tennessee Company he has an opportunity of almost limitless possibilities.

THE COTTON MOVEMENT.

A bulletin of the United States Census just compiled shows that of the United States supply of cotton in the year ended August 31 last the cotton crop of 1906 contributed 12,897,714 bales, and that of 1907, 200,278 bales. Stocks held on September 1, 1906, amounted to 1,349,139 bales, and the imports of foreign cotton in the year were 202,733 bales. Of the total supply, 4,984,936 bales were consumed by American manufacturers, 2,410,993 bales in the cotton-growing States and 2,573,943 bales in other States; 22,952 bales were burned and 8,503,265 bales were exported, leaving 1,514,567 bales in stock at the end of the year. Of this remainder, 1,016,738 bales, or 67 per cent., were in the hands of the manufacturers, 388,919 bales, or 26 per cent., in independent warehouses or compresses, 54,596 with transportation companies, 40,088 with merchants, buyers, ginners and cottonseed-oil mills, and 14,226 bales with the producers. The total value of exports of American cotton goods was \$32,305,412, of which \$11,496,734 was for unbleached cloths, \$2,240,431 for bleached cloths and \$7,502,082 for dyed, colored or printed cloths.

In his report for November 8 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 69 days of the present season was 3,211,869 running bales, a decrease under the same period last year of 793,462 bales. The exports were 1,501,700 bales, a decrease of 365,210 bales. The takings were, by Northern spinners, 338,573 bales, a decrease of 74,310; by Southern spinners 544,533 bales, a decrease of 211 bales.

SOUTHERN IRON ORE.

Of the 47,740,728 long tons of iron ore produced in 1906, 6,244,800 tons were pro-

duced in the South. The record by States was: Alabama, 3,995,098 tons; Georgia, 411,230 tons; Kentucky, Maryland and West Virginia, 46,940 tons; North Carolina, 56,057 tons; Tennessee, 870,734 tons; Texas, 36,660 tons; Virginia, 828,081 tons; total, 6,244,800 tons.

TO DOMINATE IN BASIC STEEL.

Destined Part of Alabama in the Great Industry.

[New York Herald.]

In discussing the purchase by the United States Steel Corporation of the Tennessee Coal, Iron & Railroad Co., Mr. Richard H. Edmonds, editor of the *MANUFACTURERS' RECORD*, said:

"About 10 years ago the late Abram S. Hewitt, universally recognized as one of the world's greatest metallurgists, gave me for publication an interview in which he said that Alabama would 'within 25 years from that time dominate the basic-steel industry of the world, just as Pittsburgh and the lake region dominated the Bessemer-steel industry.' All experts familiar with the vast supplies of ores in Alabama and their proximity to coal have recognized that this situation, as clearly seen by Mr. Hewitt, is one of the greatest assets of America.

"I take it that the long-headed people who have managed the Steel Corporation have recognized this strategic importance of the Alabama field just as fully as Mr. Hewitt, Mr. Carnegie and others have done in the past, but the conditions of their own operations necessarily caused the managers of the United States Steel Corporation to concentrate all of their energies upon the rounding out and completion of the vast plans for the fullest development of their Pennsylvania and Lake Superior interests.

"Moreover, the people who three years ago secured control of the Tennessee Coal, Iron & Railroad Co. had a full realization of the great extent and future value of these properties, and it is quite certain that but for the present financial situation they would not have parted with the control of that property for even three or four times what present necessities have compelled them to accept. However much it is to be regretted that the men who owned the Tennessee Company and who knew its almost immeasurable possibilities have been compelled to part with it, the Steel Corporation is the chief beneficiary of the deal.

Vast Fields of Ore.

"When the Steel Corporation was organized it claimed ownership of about 700,000,000 tons of iron ore. This has since been increased by securing the Hill properties; but it has been fully demonstrated that the Tennessee Company owns not less than 700,000,000 tons of ore, or as much as the Steel Corporation owned when it was first organized, and at least 200,000,000 tons more than the highest estimate put upon the amount owned by the Hill interests. In addition to this, the Tennessee Company owns far more coal than the Steel Corporation has ever owned before, estimated at 2,000,000,000 tons.

"If the Tennessee Company did not have a single furnace or a single mine its properties would be worth far more than the cost to the Steel Corporation. The fact is, while the Steel Corporation has estimated its iron ore in the ground as worth a dollar a ton, it would have to put an estimate of only five cents a ton on the ore in the ground in Alabama and count its coal at only five cents a ton to make a total valuation of \$125,000,000, or more than four times the cost of the property to the corporation.

"Some months ago I received a letter from J. Stephen Jeans, secretary of the

British Iron Trade Association, one of the world's greatest iron authorities, in which, referring to the increasing scarcity of ores compared with the world's increasing demand, he said that iron ores were becoming of such priceless value it was quite possible that in the near future no country would permit their exportation, and that if the Steel Corporation was now being formed it would be justified in putting a much higher capitalization than \$700,000,000 on its 700,000,000 tons of ore. In other words, that they would be justified in really estimating the value of their ore in the ground more nearly at \$2 a ton than at \$1.

Importance of Alabama District.

"With the 700,000,000 tons of ore to which in the course of events it has now fallen heir through its purchase of the Tennessee Company, its own future is made safer and sounder than ever before. So important is the Alabama region and so strategic is the situation that it is practically certain that economic development and the safety of its operations for the future would have compelled the Steel Corporation to enter the Alabama district, even if it had to do so at a cost of four to five times as great as it has now paid for the Tennessee Company. I believe that no one familiar with the whole history of the iron and steel industry of the United States can question the fact that the purchase of the Alabama properties is vastly more important to the Steel Corporation than was the purchase of the Hill ore lands, and that the price at which the former were secured is so triflingly small as compared with inherent values that this is the most important deal made by the corporation since it was first organized.

"Until the Gary plant is completed the Steel Corporation would not have been able to provide basic rails to meet the demands of the railroads, but by the purchase of the Tennessee Company it immediately gets into the market with the control of the only basic-rail plant in the country except that recently built by Schwab at Bethlehem. This move on the part of the Steel Corporation is of world-wide influence and importance. It marks a new epoch in the steel industry of America as emphatic as that which was inaugurated by the organization of the Steel company itself. As Alabama is destined to fulfill Mr. Hewitt's prediction of dominating the basic-steel industry of the world, it was essential for the best interests of the Steel Corporation that it should get into that field at the first possible opportunity, and it has utilized the present situation to do so at a price which adds enormously to its own strength."

THE INLAND WATERWAY.

Broad Scope of the Undertaking Briefly Sketched.

[Special Cor. Manufacturers' Record.]
Houston, Texas, November 9.

In his address before the Interstate Inland Waterway League in session here Mr. H. L. Gueydan of Gueydan, La., voiced the interest of the league in the movement for an appropriation for \$50,000,000 for the improvement of rivers and harbors, sketched the progress made upon the waterway which is to connect the Rio Grande and the Mississippi, and, with special reference to that, quoted the following from a letter which he had written to the Inland Waterways Commission:

"As vice-president for Louisiana of the Interstate Inland Waterways League, whose object is the construction by the Government of an inland waterway along the American coasts of the Gulf of Mexico and the Atlantic ocean, I wish to call the attention of the commission to the transcendental importance of the project as a national undertaking destined to consti-

tute a very important part of your general plan of an inland waterways system.

"I refer you to the relief map of the United States Geological Survey, annexed hereto, which will make apparent at a glance the necessity of including such a work in your general plan, and which brings out sharply how cheaply and quickly this great work can be accomplished along the lowlands of the Gulf and the Atlantic. It is proper that you should consider primarily the great Mississippi basin and make it the basis, as it were, of your general work. It becomes your duty, however, to consider every other section of the United States, affording relief where possible and connecting up where practicable the different smaller systems with the grand basic system of the Mississippi valley. What plans have you conceived to amalgamate the great Appalachian watersheds into working systems of practical value? Can you conceive of a better plan for the eastern shed of this important chain of mountains, which drains into the Atlantic, than to gather and mingle the waters of its many rivers at the foot of the slope, where these empty into the sea into an inland canal or waterway? The same can be said of all the rivers of Georgia, Florida, Alabama, Mississippi, Louisiana and Texas other than the Mississippi river, which drain into the Gulf of Mexico—that is, that an inland waterway along the coast would connect them all.

"The long, creeping, still waterway contemplated by our Interstate League starts at the Rio Grande, and as it proceeds north and eastward along the Gulf coast it picks up the several river strands of Texas and Louisiana and ties them as a whole to the great Mississippi at or near New Orleans. Eastward it continues its journey, making a common system of rivers, large and small, that flow into the Gulf, till it reaches Florida, a part of which it lops off, thereby saving hundreds of miles to the coastwise light-draft traffic. Now it is coasting along the Atlantic in a north-northeasterly direction, still tying rivers to the Father of Waters and taking, as it were, a warm inland Gulf Stream to the cooler shores of the Atlantic.

"This great waterway, partly natural and partly artificial, has now accomplished its many objects. It has connected to a base line 3300 miles long the many important navigable rivers of the Atlantic seaboard and of the Gulf coast, aggregating thousands of miles of commerce-bearing streams; it has connected this grand system of water transportation with the grander system of the Mississippi valley for, say, nine-foot barge navigation, the cheapest under the sun (as the Great Lakes tonnage will attest); it has concentrated Government funds on this great undertaking that would have been spent otherwise in deepening the mouths of small streams to less advantage; it has laid the foundation for many a drainage reclamation project which in time will be undertaken by the Federal Government, and it has developed wonderfully and made populous the richest agricultural lands in the United States—that part of our country which can sustain the most people to the square mile."

The Atlantic Inland Waterway.

[Special Cor. Manufacturers' Record.]
Wilmington, N. C., November 8.

Congressman John H. Small, who has borne an active part in working up sentiment in favor of the inland waterway from New England to Florida, was one of the busiest and most sought after men in attendance at the waterways convention here this week. When I asked him to tell me something of the progress being made by the great project with which his name is so intimately associated, he said:

"So far as the Norfolk-Beaufort Inlet portion of the project is concerned, it is absolutely essential for the proper development of Eastern North Carolina, and its completion will affect transportation throughout the entire State. But its greatest importance, and the greatest benefit to accrue from its construction, lies in its relation to our coastwise trade. The coastwise trade between the cities south of Hatteras and the cities north of Hatteras is very small in volume. For instance, Wilmington, Georgetown, Charleston, Savannah, Brunswick and Jacksonville have very little coastwise trade with Norfolk, Baltimore, Philadelphia and New York. This is due to the great danger of navigation around Cape Hatteras and Diamond Shoals. The construction of this Norfolk-Beaufort Inlet waterway will avoid the dangers of both Cape Hatteras and Cape Lookout, the two most dangerous points on the Atlantic coast. This protected waterway has been aptly called the 'waterway behind Cape Hatteras.' With the construction of this waterway will follow a great increase in our coastwise trade, particularly by small steamers and barges. The interest in this matter is growing, and on November 18 and 19 there will be held in Philadelphia a meeting to be known as the 'Atlantic Deeper Waterways Conference,' the intention being to consider an inland waterway from Cape Cod to Florida. It is hoped all the Atlantic seaboard States will be represented at this meeting, which I conceive to be of prime importance."

Congressman Small was active in the meeting here last week called by the Wilmington Chamber of Commerce and composed of representatives from the various business organizations throughout the State for the purpose of forming the North Carolina Waterways Association, to be associated with the National Rivers and Harbors Congress. The object of the association is to advocate the improvement of the waterways of the country generally, and especially to bring about the deepening of the channel of the Cape Fear river to 30 feet from Wilmington to the ocean, a distance of 27 miles.

In addition to the delegates from a large number of commercial bodies, there were present Senator Lee S. Overman and Representatives Godwin and Page. All these gentlemen pledged themselves and their colleagues in Congress from this State to labor incessantly for the project under discussion, and all showed a thorough acquaintance with the scheme, its value to the State at large and the necessity of securing quick action in its behalf.

The plan of deepening the Cape Fear river has already been placed among those to receive constant Government support, but the work is now being carried on in such a piecemeal way as to make it cost very much more than it would cost if done in a different manner. The channel was 18 feet deep, and money was appropriated to make it 20. This was done, and then another survey was ordered, and upon the report made it was decided that it be made 24 feet. But only sufficient money was appropriated to cut down the bottom two feet, and so now that much is being sliced off and a 22-foot depth reached. This is calculated to cost \$350,000. It is estimated that to deepen the channel from 22 feet to 24 feet will cost \$750,000, and that to carry out that plan of cheese-paring the bottom of the river will make the total cost a great deal more than if the plan of doing the entire job at one time were adopted. It is hoped, therefore, that Congress can be sufficiently impressed with the importance of the matter so that, when considering it again, instead of making the appropriation for the 24 feet already provided for in the plans of the War De-

partment, it will order the 30-foot channel made and provide the money for doing it.
GEORGE BYRNE.

TO MINE 500,000 TONS YEARLY.

Operations of the Big Coal Company in West Virginia.

[Special Cor. Manufacturers' Record.]
Charleston, W. Va., November 11.

With the inauguration of operations by the Big Coal Co. on what are known locally as the lands of the Rowland Coal Co., in Raleigh county, an important development of the remarkably rich fields of the Coal River basin has been put under way. It is declared by authorities that nowhere in this country is there a greater coal territory than the Coal River contains, for at places in that section there are found in column as much as 40, 60 and more feet of coal, and the seam first opened up and now under operation by the Big Coal Co., one of the best of the Kanawha measures, is at times as much as 11½ feet in thickness.

The Big Coal Co., chartered under the laws of West Virginia, has as its officers Messrs. John H. and D. G. Jones, president and vice-president, who are of the Pittsburgh-Buffalo Company, with offices in the Frick Building, Pittsburgh, Pa., and S. C. Rowland of Baltimore, secretary and treasurer. These and the following are directors: J. Roman Way, Williamsport, Pa.; J. U. Crawford, Philadelphia; H. P. Jones, Pittsburgh.

A railroad has been built to the property by the Chesapeake & Ohio in the shape of a 15-mile extension of the Cabin Creek branch of that road to the new town of Dorothy, on the tract. It is proposed to operate the mines of the Big Coal Co. on a very extensive scale. An output of 500,000 tons a year is counted on as a maximum of the near future, and as there are, all told, several billions of tons of coal in the entire tract, it is evident that more extensive development will result in an enormous increase in the output of the Kanawha coal territory through the inauguration of this big enterprise.

The principal markets for the coal of this operation will be Cincinnati, Chicago and Detroit, although it is stated that efforts will be directed toward the development of an export trade. Analyses of the coals on the tract demonstrate their coking properties, and coke ovens are proposed as a further development later on.

About 67,000 acres are in the tract of land acquired by the Big Coal Co. Before the railroad was built the coal, of course, had only a prospective value; but something of the bonanza it will prove may be understood by calculating that Kanawha coals run as high as 1200 tons to the acre to each foot of thickness in measure. Taking only the 11½-foot vein now opened up for operations—and it is declared this is but one of four or five workable seams on the tract—and putting the output at only 1000 tons per foot, there would be a production of 11,500 tons to the acre, which, if mined on royalty at eight cents a ton, would yield \$920 an acre, or at present costs of mining and the market price per ton would give to the operator something like \$5000 an acre profit. As it is believed that large parts of this tract will show 20 feet or more of workable coal, while some of it will very probably run two or three times as much, an idea may be gained of the wealth of West Virginia's natural resources, only now coming to be really appreciated and understood.
ALBERT PHENIX.

The steamer Dinsdaleha! from Hamburg via St. Michaels and Bermuda arrived at Portsmouth, Va., last week with a cargo of 6000 tons of kainit, 2500 tons of which were discharged at Portsmouth and the remainder at Wilmington, N. C.

Work of the Railroads for Southern Immigration.

[Written for the Manufacturers' Record.]

Following its recent editorial suggestion that the pending slackening up of undertakings in different parts of the country is the opportunity for the South to swell the tide of its immigration movement, the MANUFACTURERS' RECORD requested leaders in the work for immigration being done by railroad lines operating in the South to discuss briefly the suggestion and at the same time to make some statement of the work which they have accomplished during the past year. Their views as set forth below, while varying in other particulars, are as a unit as to the opportunities in the South for the farmer from other parts, and while the statements of results are not minute enough to permit of statistical presentation, they show that the trend of homeseekers is toward the South, and that their satisfaction with conditions there is likely to swell their volume. One road, for instance, operating west of the Mississippi river has handled during the year 100,000 homeseekers on homeseekers' dates alone, and about 1,000,000 acres of land have been sold for farms. Another in Virginia reports 301 farms sold, with an acreage of 61,423 acres, representing an investment of \$1,262,626. A third has located in Alabama 245 families, who purchased 16,640 acres of land, and a fourth carried into the Southwest 105,695 homeseekers, of whom 35,945, with 6507 carloads of household goods, were established upon farms. One agent is enthusiastic over his work, and expresses a wish rather to see a man and his family come into his territory with limited resources and take about 25 or 30 acres of land than for him to purchase a farm of 200 or 300 acres. Another cites the changes that have taken place in Mississippi through immigration until where cotton and corn were formerly grown almost exclusively, now a variety of vegetables are grown for the Northern and Eastern markets. The general impression from the letters is that at no other time were prospects for immigration to the South better than they are at present. The letters follow:

F. H. LaBaume, agricultural and industrial agent Norfolk & Western Railway Co., Roanoke, Va.:

"I want to commend you most heartily for your concise yet comprehensive treatment of the situation as it exists here today. You have struck the keynote, I believe, in the future development of this Southern country when you recommend the exploitation of our resources and advantages among our own American population. No other section of the United States offers the opportunities for the laboring man, the mechanic and all those of limited means to acquire property and attain independence as do the Southern States of America. This is a country eminently adapted to intensive farming, and that is the most satisfactory method for the man whose working capital is small and who is compelled to hew out his own salvation as he develops his own farm. I would rather see a man and his family come down with limited resources and take over 25 or 30 acres of land with the determination to go ahead and get results than to see him come down and purchase 200 or 300 acres with the frequent result that he is not able to cultivate half of it as it should be cultivated, and therefore is inclined to be dissatisfied with his new home. Labor is scarce and difficult to retain everywhere in the agricultural sections. With a small farm, however, a man and his family can keep it in condition of the highest productivity and not have to go into the market for outside help.

"I enclose herewith two little pamphlets

detailing our proposition in Waverly. I wish you could see the happy, contented little colony that we have already located. As you state in your editorial, the time when the workingman, the mechanic and the small-salaried clerical employe begin to think of acquiring a home for themselves is not during periods of highest prosperity, but during periods of business depression and inactivity. I believe that during the coming two or three years we are going to experience a greatly-awakened interest in the South and its possibilities from an agricultural standpoint. I have considerably over 50,000 names on my index here, and I am going to follow up most of the list aggressively this fall and winter, believing that this is going to be a more propitious time than we have seen in the past six or eight years. The population of the cities and large towns has increased at an alarming rate, resulting in congestion in many of the larger industrial centers. We can draw upon this congested urban population if the advantages of the South are properly presented to them. The most necessary factor at the present time is publicity, and I believe every State south of the Mason and Dixon line could not invest from \$25,000 to \$100,000 annually to better advantage than in advertising their agricultural opportunities and advantages to the population of the North and West. Publicity is the keynote of success, and we are not going to induce these people to come down unless we advertise our advantages and then follow up their inquiry with systematic correspondence and attractive literature.

"Competent authorities estimate every new able-bodied settler to be worth at least \$1000 to the community, and the realization of this fact is what has insured the wonderful development and marvelous advancement of the far West. We must shake off our lethargy here in the South, and above all things, extend to every new settler a welcome so spontaneous, hearty and sincere that he will be loath to leave us after he comes down. We bring in over 2000 homeseekers yearly and locate about 300, or 15 per cent. I think if a universal hearty welcome were given them by our own native population that we could double the percentage of actual settlers.

"To summarize, let me state briefly what I consider the paramount factors necessary in the successful prosecution of a campaign to induce a desirable class of new settlers into our Southland:

"1. Publicity, meaning attractive advertising in leading periodicals.

"2. Hearty co-operation of all interests, including individual, corporation and State.

"3. Systematic organization of real-estate men, business men's bodies and boards of trade, and others who can be interested in formulating plans for the proper reception and treatment of the homeseeker after he arrives.

"4. The inculcation among our native population of a spirit of helpfulness, encouragement and hospitality to the stranger, instead of the spirit of suspicion, hostility and discouragement which now prevails to a large extent.

"I append herewith a brief statement showing industries located and capital stock subscribed thereto; also number of farms sold, the acreage and the amount invested therein during the past 12 months.

"Statement of industries located and farms sold from August, 1906, to August, 1907:

"Industries, \$0; capital stock, \$10,210,000.
"Farms, 8; capital stock, \$175,000.

"Farms sold, 301; acreage, 61,423; amount invested, \$1,262,626."

S. A. Hughes, general immigration agent St. Louis & San Francisco Railroad Co., St. Louis, Mo.:

"The reprint of an editorial in last week's issue of your publication I have read with a great deal of interest, and fully appreciate what you say with reference to the South's development, inasmuch as I have just completed a motor-car tour over our new lines between Houston and New Orleans, where there appears to be a world of unoccupied territory now awaiting the hand of man for development.

"With reference to the placing of the foreigner upon the land, I am frank to state that the problem has not been solved, and the mere fact that 1,500,000 aliens will land upon our shores this year, and the great bulk of them locate east of the Allegheny mountains, appears to me to foreshadow a very serious condition, and not far distant. In discussing the economic questions of the day the subject of immigration has been given serious consideration by Congress, and it looks now as though plans might be consummated for a more equal distribution of the alien by landing more ships at New Orleans and Galveston and by using the appropriation made by last Congress for increasing the facilities for handling emigrants at the above-named ports.

"This, however, does not altogether solve the problem, and I am of the opinion that it will be necessary in placing the alien upon the land to have the land well in hand and to direct the alien from his point of embarkation to the farm in America. This is the manner in which we are building a Swiss colony in Missouri, and while it is a little slow in working out, its ultimate success is assured. Any effort now being made to direct the alien from the congested centers of the East to the land in the South and Southwest will, in my opinion, prove futile, as the foreigner landing upon our shores today is attracted by the wage scale, and he will go where the greatest wages prevail.

"Our efforts are largely concentrated upon the handling of our own people in America, and I want to say that within the last five years, since the tide of immigration has been turned to the Southwest, that more land has been sold and more good has been done in the cause of humanity than in any similar period in the world's annals of agriculture.

"You have asked me to cite you to figures as to what has been accomplished in the handling of homeseekers during the past year, and while it is impossible to give you the exact data, I would say that, conservatively speaking, the Rock Island-Frisco lines during the past fiscal year have handled 100,000 homeseekers on homeseekers' dates alone, and that as many more have been handled on other dates and in the regular flow of travel. I think that I would be safe in saying that pretty close to 1,000,000 acres of land have been sold during the past year, and the bulk of it has been opened in farms, as reflected in the enormous tonnage now being handled by our lines.

"This applies to Missouri, Arkansas, Oklahoma and Indian Territory, Kansas and Texas. This work has been accomplished by the campaign of advertising carried on during the past five years by the Rock Island-Frisco lines, and by the personal solicitation of an army of land and immigration agents, consisting of real-estate men, bankers and others interested in land propositions in the territory adjacent to our lines.

"Indications point to a continued increase in the movement of people from the old States into the new territory, and I am of the opinion that there never has

been a time when so much interest has been manifested among the people of the older States as has been during the past five years; in fact, there appears to be a land hunger and a general tendency upon the part of the people to better their conditions in life and to look to the land from whence all blessings flow."

J. F. Merry, general immigration agent Illinois Central Railroad Co., Manchester, Iowa:

"I have read with interest your recent editorial on the 'South's Opportunity.' You make the statement that mechanics are being thrown out of employment and laborers are now looking for work. The present financial condition is quite liable to bring about that result in the near future, but I hardly think such conditions now obtain in the West. It is almost impossible to hire men at any price for any kind of work. Common laborers in this vicinity are paid from \$2 to \$2.50 per day. A man with a team \$3.50, and difficult to get even at this price. I think your position is correct, that when all classes are prosperous there is not the disposition to change locations as when they are the reverse, and I agree with you fully that now is an opportune time to advertise extensively the agricultural resources and possibilities of the South. We have distributed from this office within the past 15 months 1,500,000 circulars and pamphlets advertising Kentucky, Tennessee, Mississippi and Louisiana, and we are now seeing the fruits of such advertising.

"As an illustration, take the State of Mississippi. Only a few years since and its agricultural productions were confined almost exclusively to cotton and corn. I enclose you herewith a circular embodying a letter from one of the business men of Crystal Springs, Miss., in which he shows what has been done at that point during the past season in the cultivation and shipment of vegetables. Crystal Springs is a small town of possibly 2000 inhabitants, and you can well understand why farmers who can make an average of \$165.15 per acre in growing vegetables and the same season can grow a bale of cotton or 50 bushels of corn per acre on the same land are in a most prosperous condition. I also enclose you a circular which embodies a letter from Prof. W. H. Smith, county superintendent for Holmes county, Mississippi, which indicates that corn-growing in Holmes county in future years will be more profitable than it has been in the past, and the 'Boys' Corn Club' idea will spread throughout the State until nearly every county will more than double its yield of corn per acre. Such experiments as these appeal to farmers of the Northwest who contemplate a change of location. Let me also call your attention to the fact that the growing of alfalfa in Eastern Mississippi without the inoculation of the soil has already become a great industry. Men from Illinois and other sections of the country have only recently learned that the soil of that section contained a sufficient amount of lime to make it especially adapted to the growing of alfalfa.

"I am in receipt of letters from parties who have been engaged in the growing of alfalfa the past season in Eastern Mississippi who stated that they made five cuttings, and that they made over \$00 per acre on an average, and some even as high as \$100 per acre. I have referred you to three agricultural industries in Mississippi, two of which are practically new.

"These are only a few of the many phases of farming in Mississippi that are especially successful, and these conditions are doing much to attract attention of land investors and homeseekers, but I do not look for any great rush to the South, such as we have witnessed in the West and

Southwest, and my own conviction is that it will be far better for all concerned if, instead of a great boom, we can locate only such numbers of families as turn toward the South with the expectation of making that their permanent home, rather than a lot of speculators who will go there for a day and buy a farm with the intention of selling it on the first opportunity. The South is rapidly advancing, and now that the prejudice against the South, which obtained for many years after the war, is almost entirely obliterated, and people understand that in no section of our common country can agriculture be carried on more successfully than in the South, I am sure there will be a steady annual increase in the population and in the agricultural, industrial and commercial development of that particular section of the country. It is impossible for this office to keep a strict account of the number of families that are annually located at points contiguous to our Southern lines, but I am glad to advise you that there has never been a year when the conditions were so favorable as the one now drawing to a close, and I confidently expect interest in the South will continue to develop more and more every year, at least until the tillable lands of that section are sold at prices three or four times what they are today."

M. V. Richards, land and industrial agent Southern Railway Co., Washington, D. C.:

"This editorial is exactly along the right lines, and I am hopeful will fully serve the purpose intended. We can best answer your inquiry as to the results achieved by this department by enclosing an article just from the press which is now being distributed to the newspapers, setting forth the compilations made by the land and industrial department of developments throughout the territory reached by Southern Railway and Mobile & Ohio Railroad."

In addition to the statistics of new industries established, which are published elsewhere in this issue of the MANUFACTURERS' RECORD, this circular says:

"The gain in farm values and farm production in this region has kept pace with the remarkable industrial development. New settlers from the North and from Europe have gone into the various communities along the lines in increasing numbers, and large investments have been made in both improved and unimproved farm properties."

C. B. Schmidt, commissioner of immigration Rock Island-Frisco Lines, Chicago, Ill.:

"I take pleasure in informing you that the development work along the lines of the Rock Island-Frisco system by immigration to the Southwest has made satisfactory progress."

"Go to the union stations at any of the principal gateways of this great railway system on the days and at the hours when the semi-monthly so-called 'homeseekers' excursion trains start out over its lines, and you will no longer wonder at the rapidity with which the vast Southwestern territory is being peopled. During the fiscal year ended June 30, 1907, from 2500 to 3500 people have availed themselves of the cheap homeseekers' rates on each of these excursion days, when the regular schedule trains had to be sent out in from three to five sections of from seven to ten coaches each, and this aside from the every-day travel by the regular trains at regular rates."

"The records of our department of immigration show that 105,695 homeseekers have availed themselves of those excursion trains during the 12 months ended June 30, 1907. The records also show that of this number, 35,945 persons, composing 8365 families, with 6507 carloads

of household goods, have actually established homes in the new Southwest along the Rock Island-Frisco lines. And there is now every indication that this movement has only fairly begun. The immigration bureau of the Rock Island-Frisco lines in Chicago and St. Louis are taxed to their utmost capacity answering inquiries by mail from prospective homeseekers and supplying them with descriptive literature. These inquiries come from all parts of the country, but largely from the Northern and Middle States."

"A comparatively small portion of the great and constantly-increasing foreign immigration as yet finds its way direct to the Southwestern States. According to the annual report of the Federal Bureau of Immigration for the year ended June 30, 1906, only about 4 per cent. of a total influx of 1,100,735 aliens, while over 90 per cent. remained in the North Atlantic and the North Central division of States, where it congests the population of the larger cities and labor centers, while the whole South, from the Atlantic coast to the Rio Grande river, is suffering from a labor famine in all lines of work, and where millions of acres of cheap and productive lands, even free Government lands, are yet available for settlement."

"Your editorial suggestion that 'the South has given too little thought to securing settlers from other portions of our own country, and has centered its work largely upon the idea of foreign immigration,' is perhaps to some extent well founded, but yet in the interest of the whole country a campaign of education in the old countries whence the immigration starts for the United States is a patriotic enterprise, as it will tend to an advantageous distribution of that 'peaceful invasion,' as Mr. Sargent calls it."

Wilbur McCoy, agricultural and immigration agent Atlantic Coast Line Railroad Co., Jacksonville, Fla.:

"I think you have sounded the keynote of our immigration association. In choosing foreign immigration it seems to resolve more into a labor-recruiting proposition."

"As far as the South is concerned, I am satisfied that the farmers in the South are not in position to handle foreign laborers on their farms. There are but few, if any, that have good quarters for them, and farming in the South is not attractive to the foreigners, especially when they find out, as they soon will, that they can get better wages elsewhere, and I do not believe that laborers from Europe can be made a success. If good labor is to be secured the farmers must also raise the standard of conditions until they are equal to similar conditions elsewhere. To offset these conditions the farmers must abandon their primitive methods, clear their land thoroughly and use the latest labor-saving machinery."

"I have always contended, however, that the solution of the labor question in the South is in securing the farmer of small means, who can, at the present price of land in the South, secure a farm of sufficient size to support himself and family and make some money. Next to this, if we want foreign immigration on farms, is to make tenants of them, and not laborers. The best success we have had is in securing the farmer of small means from the North and Northwest, who can, by disposing of a small farm there at present prices, secure a comfortable and small farm in the South for less money."

F. E. Roesler, traveling passenger and immigration agent Kansas City Southern Railway Co., Kansas City, Mo.:

"There are so many considerations involved that one single line of argument to show why there is no great Southern immigration movement would leave the sub-

ject incomplete. I have not found in my experience that the laborer or factory employe makes a good farmer, even under the most favorable conditions, and doubt their usefulness in the South, except when working in industrial lines. Of course, some of the factories need more help or cheaper help, but this is a small item compared with the millions of vacant acres that ought to be farmed. The farmer for the South must come from the Northern farms, and he will be hard to get into a timbered country as long as Southwestern prairie land is moderate in price."

Frank Y. Anderson, land commissioner Alabama Great Southern Railroad, Birmingham, Ala.:

"I have read with considerable satisfaction your article on 'The South's Opportunities,' and heartily endorse every word of it. I have never catered to foreign immigration, believing it far better to locate people on our lands from the North and West acquainted with our language, laws and customs, and hence better fitted for citizenship and to assimilate with our people."

"Nine-tenths of the class I deal with are looking for permanent homes and seeking a climate beneficial to their health and a country where their financial status would be improved and their means of existence far easier to accomplish than obtainable in the cold and rigorous climate of the North."

"I have located a good many families in Alabama whose parents, years ago coming from Europe, married and settled in the West and raised a family of boys too numerous for the lands owned by their parents, and who consequently, to better their

condition, sell out and move to Alabama, where lands can be purchased sufficient to give every boy a farm for himself for generally less than the amount their farm in the West would realize."

"A few years ago I located along the line of the Alabama Great Southern Railroad in Alabama a family from Kansas composed of the parents, three sons and two sons-in-law, the father having obtained sufficient means from the sale of his farm in Kansas to purchase 480 acres of good land and thus able to give 80 acres to each of his sons and sons-in-law and to keep the same amount of land for himself, and all have prospered."

"The South today offers magnificent inducements to the man of limited means seeking to better his condition. The long summers enable him to limit his work and still raise two crops each year, and on account of the short winters it requires little feed to supply his stock; hence he can sell nearly everything he raises, and thus in the end make much more than he would on the same amount of land in the North and West."

"I regret to say that my business has fallen off since May last. For the year ended October 31, 1906, I located along the Alabama Great Southern Railroad in Alabama 358 families, each buying a home. The total number of acres these 358 families purchased amounted to 26,360. For the year ended October 31, 1907, I located 245 families in Alabama, who purchased farms from us amounting to 16,640 acres. The reason of this falling off in sales you will have to figure out for yourself, but whatever it is, it has made quite an inroad into our business."

LOWLANDS OF LOUISIANA.

Economic Importance of Reclamation Work Recognized.

[Special Correspondence Manufacturers' Record.]

New Orleans, La., November 9.

Evidences of the increased interest in the project of reclaiming the lowlands of Louisiana are manifested not only in this city and vicinity, but throughout the country generally. Newspaper and magazine articles on the various phases of the work are frequently to be seen of late, and the importance of the work from an economic standpoint is becoming more generally recognized, while at the same time the opportunities for the profitable employment of capital by individuals and corporate companies is being fully demonstrated.

In the course of a conversation I have had with Mr. Edward Wisner, who is largely interested in reclamation work, some very interesting facts were stated by him concerning the extent of the work now under way and the advantage it will be to New Orleans and all this section to have the lands contiguous to this city reclaimed and occupied by farmers, planters and truck growers. The comparative ease and cheapness with which this work may be done was another important point he made.

In speaking of the work now under way Mr. Wisner said: "What I and my associates are doing in the way of reclamation work is being done in a constantly-increasing way by others all through the lowlands of Louisiana. When we first started in the work people were indifferent and skeptical. The remarkably erroneous idea prevailed among many that the water on these lands was controlled by the Gulf; that it was, in fact, seepage water from the sea, and that efforts to drain the lands would be futile. Since the construction of levees around tracts of these lands, the digging of ditches and the operation of pumps have demonstrated the practicability of reclamation, even if the lands were

a good many feet below sea-level, instead of considerably above sea-level, as most of them are, there has been a change in popular sentiment, and farmers and planters themselves are taking hold of the idea. A most important and gratifying evidence of this change in opinion is furnished in a sale of 650 acres which I have just made at \$20 an acre to a man who could have bought the same property, in identically the same condition it is in today, for 25 cents an acre eight years ago. He is a local man, and the property joins his own. He had similar lands, and these lowlands he didn't regard as of any value. This was before any demonstrations had been made here of the possibilities of reclamation work. Since he has seen what a really simple matter it is to reclaim the Louisiana swamp lands, and has discovered that the reclaimed lands are worth \$100 to \$200 an acre, he will dig ditches, put in pumps and get his heretofore despised lands ready for cultivation right away."

"This man is merely one of many. The Godchauxs and Charles Matthews, officers of the State Drainage Association, are doing work of this kind; the McIlhenny interests are developing a 3000-acre tract of salt marsh lands in Iberia parish, and altogether some 150,000 acres are being worked on in the parishes of St. Bernard, Jefferson, St. Charles, La Fourche, Terre Bonne, St. Mary, Iberia and Vermilion. I am developing a 5000-acre tract, and as soon as I get that ready for the plow will take up other tracts."

"From every point of view I regard it as of the utmost importance to New Orleans and the State of Louisiana that this reclamation work should be done, and I believe it will come about more rapidly if undertaken by individuals and incorpo-

rated companies. The low cost of the work and the great enhancement in the value of the lands where reclaimed certainly offer tempting possibilities of profit to the capital employed. There are some 7,000,000 acres of swamp lands in Louisiana susceptible to reclamation, and that cannot be cultivated until reclaimed. Besides being sufficient to double all the agricultural products of Louisiana—rice, cotton, sugar, truck and everything combined—the addition of this area to the tilled land of the State would more than double the population of Louisiana, and besides immensely benefiting New Orleans through increased urban and suburban population, would build up many new towns and greatly add to the wealth and prosperity of every enterprise and institution in Louisiana.

"Suppose an Indian reservation of 7,000,000 acres were to be thrown open to morrow. There would be a rush that would take up practically every acre of the tract within 24 hours, and yet there isn't a 7,000,000-acre tract anywhere in the world that can equal in fertility the 7,000,000 acres of idle swamp and wet prairie lands contained in Louisiana.

"Of course, the supposed abundance of swamp lands in the United States is one reason why the people have not seized these opportunities here some time ago. If we had only a few hundred thousand acres, as is the case in California, they would have been developed as the California lands have been, and as Holland's restricted acres have been wrested from the sea. In California it takes \$35 an acre to reclaim the tule swamp lands, which are worth when reclaimed no more than ours, while the average reclamation cost in Louisiana is about \$15. In Holland, where they are now arranging to push back the entire Zuyder Zee, it will cost nearly \$76,000,000 to secure the 1400 square miles. This is about \$85 an acre. Holland will thus get for \$76,000,000 only

896,000 new cultivable acres. It would cost but little more than \$100,000,000 to reclaim and make ready for the plow the entire 7,000,000 acres of wet lands that Louisiana contains.

"It is frequently stated, with apparent authority, that there are 77,000,000 acres of swamp lands in the United States. As a matter of fact, there are not more than 25,000,000 that require reclamation work. By acts of Congress passed in 1850 and 1860 the Government turned over to the States something more than 82,000,000 acres of swamp lands. But except in Florida and Louisiana there are no longer any large bodies of swamp lands. The so-called swamp lands in the States of Ohio, Indiana, Illinois, Southern Michigan, Southern Wisconsin, Iowa, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana above the mouth of the Red river have largely been reclaimed and are under cultivation today, and in most cases those that are not under cultivation simply require drainage, no further reclamation work being necessary. Florida has about 10,000,000 acres of swamp lands, the Everglades containing about 3,000,000 itself. Outside of Florida and Louisiana, the rest of the country contains about 8,000,000 acres. Distributed along the South Atlantic coastal plane from New Jersey to Florida, with some in Southern Georgia, like the Okofenokee, North and South Carolina have swamp-land areas that rank them next after Florida and Louisiana. Texas has probably 1,000,000 acres, and the rest are in Northern Michigan and Wisconsin.

"It is manifestly impossible that such fertile lands as these of Louisiana will not all be taken up in the course of time. We who are interesting ourselves in the enterprise are endeavoring to have the work done so as to benefit the people who are now on earth, and I am very much gratified by the progress we have made."

ALBERT PHENIX.

Drainage Upon an Individual Basis.

[Special Correspondence Manufacturers' Record.]

Belhaven, N. C., November 11.

While men in other sections and in other States are looking to the general Government or the State government or to county taxation to inaugurate a system of drainage by which the thousands of acres of swamp lands in the Southeastern States will be reclaimed and made arable, a couple of sturdy Beaufort county men are going ahead carrying out a project of drainage on their own account. They are John A. and Samuel W. Wilkinson, and their home is here. Beginning two or three miles north of this place and extending some 10 miles north and south and from 60 to 80 east and west is the Albe-marle and Pantego swamp, a great body of wet land, less only in extent than the far-famed Dismal Swamp. Along the edge of this swamp various persons have dug drainage ditches and reclaimed farms of a few hundred acres, but these Wilkinson brothers are the pioneers in the business in a large way. They have 25,000 acres of these swamp lands, and they have set to work to drain the entire body with the exception of about 1000 acres already drained and under cultivation.

One would naturally think, and for many years the people of this section thought, that the swamp lands, holding water as they do, were lower than the lands surrounding them, and for that reason not easily susceptible of drainage. But by actual survey it was demonstrated that the swamp lands in this section are the highest lands anywhere around, and then the problem of reclamation began to look easier. The Wilkinson brothers

learned this, and they already knew that the swamp lands when once drained were the richest in the country, the most profitable to the agriculturist. So they set about putting what money they could command into swamp lands, with the intention of draining them and then either selling or farming them. Most of the 25,000 acres they purchased from a big lumber company, which retained the timber and gave them the contract for cutting the trees and loading them on cars. At the same time they entered into a contract with the South & Western Railroad Co. to make a grade for a new line it is going to build from Belhaven west. This line of road was located through their land, and so they determined to run one of their main drainage canals alongside the railroad right of way and construct the grade at the same time they dug the canal. Meanwhile they carry on the logging operation along with the canal digging and grade making, running the tracks up with the other work, thus furnishing means of communication and for carrying supplies for all the work together.

I went with the brothers the other day to see how the work was being done, and found much of interest in the manner of its accomplishment as well as in the merit of the undertaking.

A large dredge had been built and set on trucks that were fixed for carrying it anywhere on solid ground, but were of no avail in the swamp, and the whole thing had been set in a barge 22 feet wide by 50 feet long. As the digging of the canal is carried on the water from the swamp runs

in and fills it up, so that the barge floats and is easily moved along as the work progresses. Great arms on either side are thrown out and set on foundations at either side of the barge, and these bear the strain of the dredge when at work, taking it off the barge, which is not of sufficient size to sustain it. The dredge, worked and controlled by a 75-horse-power engine, cuts a canal 30 feet wide and from 8 to 10 feet deep. From the top it first takes about three feet of the loose, loamy soil, with such stumps and roots as are found in it, and dumps it to the left bank of the canal. Under this loose loam is hard clay, and this the dredge takes up and carries out to the right side and there dumps it down to make the railroad grade. The clay, being allowed to drop from the dredge at a considerable height above the ground, is packed hard by the impact, thus making a very solid roadway. So great is the fall in this canal that a dam must be built about every quarter of a mile to keep the water at a sufficient depth to float the dredge. The great machine takes up stumps, takes a bite or two from a big jumper log lying under the covering of vegetable-made soil and then breaks it in two and throws the pieces out to one side.

As fast as the clay is thrown out to make the grade it is smoothed down by men employed for that work and the track is laid. Every quarter of a mile or so the track is thrown out into the swamp, to stay there until all the timber within reach of the skidder is cut and loaded.

The canal being dug now will be, when completed, six miles long. Another one of 10 miles and one of four miles will be dug, and from these main canals lateral ditches will be thrown out to all parts of the tract to be drained, until the entire boundary is relieved of its surplus water. When this work is completed there will be no such thing as an overflow on this land, the only thing which can cause a crop failure. Four men operate the dredge and smooth down the grade, making about 125 feet progress per day.

As fast as the timber can be removed when the ditching is done the land will be cleared up and put in cultivation. After that it will be put on the market for sale in tracts of such size as purchasers may desire, but with the owners somewhat careless as to whether it sells or not, as they have such faith in farming and truck growing as a remunerative business that they will cultivate personally or by tenants such as they do not sell.

That portion of the swamp where the dredging is now being done was once thickly covered by juniper trees. In 1842 fire destroyed the timber until there was scarcely a tree left standing. Yet today, but 65 years after that fire, the land is covered with a thick growth of short-leaf or "loblolly" pine, some of which is two feet in diameter. Under the three or four feet of decayed vegetable matter that now forms the surface of the ground thousands of great juniper trees lie, many of them in such excellent state of preservation as to be valuable for making lumber but for the fact that standing timber is cheaper to handle and there is so much of it. The rapid growth of timber on this land, absolutely known to have been swept clean in 1842, shows how very feasible is the plan to reforest the lands, grow timber as fast as it is removed, where proper care is taken.

This swamp land when drained is of the highest excellence for almost all kind of crops grown anywhere in the temperate zone. It is unexcelled for corn, potatoes, cotton, oats and heavier crops, as has been demonstrated year after year on the small farms that have been reclaimed from the water. In corn 45 to 60 bushels to the acre—15 to 20 barrels—is no uncommon

crop, and a bale of cotton to the acre is easy of accomplishment. The Wilkinsons, who are good farmers, have made as high as 100 barrels of potatoes to the acre for the first crop, and have then gathered 50 barrels more from the volunteer crop that comes up after the first harvesting. For such trucking purposes as have been attempted here these redeemed swamp lands have proved of high value. Sweet potatoes, cabbage, turnips—indeed, all such things as have been tried—have produced crops large in quantity and high in value. In the fruits, peaches and pears are found to do well here, while the popular scuppernon grape grows in great profusion.

No farmer in this section is satisfied with growing one crop a season on his land. Corn is planted after potatoes have been dug, or else the land is left to yield its volunteer second crop of the tubers. Cornfield peas are planted after some early crop, and a fine yield of hay is secured after the peas have been gathered. Or, if crab grass is desired, and it makes hay of a fine quality, the land is harrowed after the removal of an early crop and the grass grows of its own motion, producing from one to two tons of hay to the acre. Another valuable quality of this soil is the ease with which it is worked. Once gotten in good condition, it remains loose and does not furnish the heavy plowing met with in many places. Small horses and mules are the rule here in farming, and they easily do the work of the much larger animals used in other localities.

The mildness of the winters is a strong point in favor of this as a farming section, because of the cheapness with which stock can be carried through that season. Grass grows so nearly all the year around that the time during which stock must be fed is of slight consequence, and therefore the farmer can afford to dispose of far the larger portion of his forage crops. From early spring to late in the autumn the broad savannahs furnish free pasturage for such cattle as the farmer chooses to allow to run at large, while for two or three months in winter very light feeding will keep them fat and in good condition until pasture gets good again. Many cattle, indeed, rustle for their feed all the year around, and make out very well at that. They live on the juicy grasses of the savannahs during the long season when vegetation is green, and in the winter go into the swamps, where the thickly-growing reeds furnish them both food and shelter, so that they emerge in the spring often in as good condition as their hay-fed kin.

For the surplus grain and forage crops, grown anywhere in this immediate section, there is ample sale at good prices in the home market, for the big lumber operations being carried on all over this portion of the State make a demand that has never yet been filled by local farmers.

And by the same token it is these big lumber operations that have made possible the reclamation of the swamps. For recently the demand for timber has been such that practically all the various kinds of wood that grow here are in demand. The gums, black and red, formerly held to be unmerchantable, are now in good demand, and many thousands of logs are being cut and hauled out of the swamps daily to meet it. The pine, cypress and juniper, of course, can all be sold readily, and now comes the pulp man and calls for the little stuff, poplar, maple and others, that can be reduced to pulp and made into paper. So that when the owner of swamp lands decides to drain and clear them for the plow he finds a good money return for much that formerly cost him money to get rid of.

The sawmill, the dredge and plow are going to work wonders in Eastern North

Carolina when once the people learn how fully they complement one another.

GEO. BYRNE.

NORFOLK TRUCKING SECTION.

A Business Yielding About \$7,500,000 Annually.

[Special Cor. Manufacturers' Record.]

Portsmouth, Va., November 9.

In the 50s Richard Cox, a Jerseyman, as they will tell you here, began the truck-growing business here, shipping his product to New York and other markets brought into reach by steamship lines. Mr. Cox is, therefore, known as the "father of the trucking business" in this section. And if he could but visit the scene he would doubtless be greatly surprised at the size and strength of his offspring.

Up to the time of the war the business had not grown much, and during the four years of the great conflict it was, of course, entirely discontinued. Nor did it rally very rapidly after peace had come for permanent abode among the people of the sections, for it was some time before the basis of friendship had been so re-established between producer and consumer as to make its rapid extension possible.

It was about 1886 when William J. Wright planted the first strawberry beds of two acres in size, he being the first to "plunge" in that delicious berry to that extent. Now two acres is a small "patch" for this section. Mr. Wright was also the first in this section to raise raspberries and blackberries for market.

C. E. Bidgood was the first man to plant as many as 100 barrels of seed potatoes. This he did in the early 70s, and his neighbors thought him crazy, telling him he would never find a market for the product. This year a young man, W. H. Binkley, who five years ago started to trucking on the small capital he had saved from clerking in a store, planted 1200 barrels, and had no trouble marketing the product.

The importance of this industry may be gathered from the figures showing the amount of the principal products shipped this year, the figures being taken from the records, and therefore accurate. Of spinach—and this is the greatest spinach-producing region in the world—the amount shipped was 500,000 barrels; kale, 250,000 barrels; radishes, 107,000 packages; peas, 100,000 packages; lettuce, 50,000 baskets; strawberries, 113,508 crates of 60 quarts; cabbages, 400,000 barrels; beets, 7283 barrels; cucumbers, 102,721 barrels and 70,000 baskets; beans, 221,000 packages; potatoes, 682,000 barrels; tomatoes, 41,162 packages; squashes, 13,000 packages; eggplant, 9000 packages; asparagus, 7000 crates; citrons, 8744 barrels; peppers, 3400 barrels; radishes, 3500 barrels; corn, 1254 packages.

These things represent a money value of about \$7,500,000. And the most valuable thing about it is that this money comes in year after year, and is diffused generally throughout the community. Prices may be a little off, so that the man who grows the truck will not make a profit, but the money comes in all the same and is paid out to the manufacturer of crates and boxes, the men employed to make and gather the crops, the dealer in fertilizers, the steamship and railroad lines and all others who have anything to do with the matter. The fact is, however, that the man who produces the truck generally makes a good profit. So regularly does he make this profit and so rapidly does it accumulate that the truckers are among the wealthiest men here, having more ready money than any other class. As an evidence of the solidity in that respect it is related that in 1893, when the New York banks were refusing to pay out money and the banks all over the country

were handing it out in very limited amounts, the bank in this city which carried the accounts of most of the truckers sent money to New York to pay the employees of a great transportation line with which the truckers did a large amount of business and which they were interested in seeing go ahead without trouble.

The reasons that combine to make the three counties of Norfolk, Nansemond and Princess Anne of such high value for trucking are a combination of soil, climate and transportation.

The soil, naturally rich and warm, is easily kept up to its full productive capacity by a proper system of fertilization. The climate is such that crops mature early enough to give the truckers advantage of the highest prices in the markets, and the growing season running through almost the entire year makes it possible to grow two or three crops annually upon the same piece of ground. Frequently two crops are seen growing together, as peas between the rows of cucumbers, while two crops of corn are often made on ground that produced early cabbages, and sometimes on ground that has yielded a crop of early potatoes. Forage crops, such as cowpeas, are planted after the removal of potatoes, cabbages or almost any other truck crop, while crab grass, which springs up everywhere on cultivated land unless kept down, yields hay in plenty and of an excellent character, sometimes two crops to the year. As for transportation, the trucking business has largely been the means of bringing to this port a line of steamships running to New York and other Northeastern cities, while a number of railroads also lend the advantage of rapid transportation to the business.

The leading truckers some years ago organized the Southern Produce Co., an incorporated concern, for the purpose of securing whatever advantage that comes from organization. This company now combines in its membership most of the truck growers in the three counties, and has proved of great value in the matter of marketing the crops. It has, among other officers, a traffic manager, whose duty it is to see that shipments are promptly made and that everybody gets an equal show with everybody else. By this means shipping facilities have been greatly improved. Especially is this true of the matter of icing, now so important in shipping perishable stuff. Formerly icing was done at a large profit, which the trucker had to pay. Now he lets the company manager know just how much of a certain crop he will have to be iced on a given day, and it is done for him at the cost of the ice, bought in bulk, and his share of the wages of those employed for the purpose. The shipments regularly made are to New York, Providence, Boston, Philadelphia, Newark, Washington and Baltimore.

The facts given here respecting the amount of shipments made refer only to the shipments through the Southern Produce Co. While this company, as stated above, comprises most of the growers of truck in this entire section, there are, of course, some who do not belong to it. What they ship independently and what is sold in Portsmouth, Norfolk, Newport News and other neighboring towns does not count in these totals. It would, of course, add to them many thousands of barrels, crates and packages and many thousands of dollars in annual receipts.

In view of these things it appears strange to the casual observer that all the available land has not been put in cultivation years ago. Fortunes have been made on Western farms, high-priced, far from markets, and where but one crop a year can be grown, and the lands have been snapped up until there is none now available for the man with the small purse.

Yet here, in the oldest part of the country, is rich land, for sale cheap, lying close to market and capable of yielding two or three crops of high-priced stuff annually, and there is no stream of immigrants crowding the railroads in their rush to secure it. Possibly those employed in the truck business do not care to invite people to come here and divide their markets. Possibly they fear that with an influx of new farmers the labor would be inadequate and the wage scale high. Possibly the truck business sounds small to the man who has never stopped to consider the immense amount of it consumed, and who does not understand that the day of small things is at hand. Be these things as they may, the fact remains that the opportunity is here for any man of industry and perseverance to found a fortune by securing a small body of these rich lands and expending a reasonable amount of time, energy and business ability upon it.

Major B. E. Rice, an Ohio man, who came to this place several years ago to make his home, recently said:

"I wish to say that if the farmers and stock growers of the North and West were to be once made acquainted with the possibilities of this Southland there would be such a flood of immigration into this country as would make the whole South to bud and blossom as the rose. Nowhere else does vegetation grow so rapidly, nowhere else do the soil and climate seem to so strongly combine to produce plant growth, and from no other locality is transportation so quickly and cheaply furnished to the great seacoast cities of the North as from here.

"In verification of the foregoing I will quote a few facts from our own experience. Four years ago I came here from the West to develop a tract of land held by a company of Western investors who thought that in some of the waste land adjacent to Portsmouth they could see a source of possible profit. Hitherto this tract had been considered by home people as of little value except for timber, and the idea of ever using the cleared land for farming purposes would have been deemed impossible. Generations had grown up beside this land, and these same generations had passed away, leaving the land no better for their living. Familiarity breeds contempt, and the impossible had been taken for granted by them, without the thought of solving any of the problems of progress. It required the contrast of other lands to discover true conditions.

"Today we have nearly 200 acres of this waste land under cultivation, and this, too, where was naught but timber and jungle four years ago. First we saw that we had nearly 20 feet of drainage fall to tidewater within half a mile. The home people had imagined the land to be low land. We were told that every hard rain would flood us, and that every severe drought would burn up our crops. We have proven both to be imaginary troubles, as land that drains direct into the ocean with 20 feet fall in less than half a mile is not in any great danger of overflow by high water, while deep, loose, loamy soil will retain and give up enough moisture in dry weather to assist plant growth to a wonderful degree. There are thousands more of these same acres around us awaiting development by investors. Our home people here were slow to believe they had been sleeping alongside a gold mine, and even now they are too modest to be loud in telling the good news to others."

Major Rice goes on to tell of raising strawberries on two acres that sold for over \$500 after paying freight and commissions; of digging 160 barrels of potatoes per acre and not regarding it a big crop, and after getting that big yield of potatoes of maturing upon the same land

as fine a crop of corn as could have been grown at a single crop anywhere in the country. He also tells how the ships pass within sight of the farms, taking truck on one day and delivering it the next in New York, Baltimore, Philadelphia and Washington, and at a cost for transportation that makes these lands appear like suburban additions to these cities.

Improved farms sell from \$200 an acre up to \$1000. Unimproved lands can, of course, be bought at a much lower price. Ten acres properly worked will yield a living and something over for the ordinary family, and big money can be made on what would in the sections devoted to large farming be entirely too little to attract the attention or occupy the time of an enterprising man.

In no section of the country does success more surely wait upon endeavor than right here in Tidewater Virginia, the birthplace of American civilization, but needing now the new birth of American enterprise and progress. GEO. BYRNE.

Kentucky Gas and Oil.

[Special Cor. Manufacturers' Record.]

Barboursville, Ky., November 11.

The Cumberland Gas Co. of this city has leased several hundred acres of territory in the vicinity of Corbin, Ky., and this week commenced the first of a series of test wells for oil or gas. A 2000-foot hole will be drilled. This company, which recently increased its capital stock to \$100,000, is now drilling a series of new tests in the Knox county field, where it already has a daily production of over 1,000,000 cubic feet.

The Central Kentucky Natural Gas Co., Lexington, Ky., is drilling new wells in Menifee and Morgan counties. The company has drilled about 30 gas wells in Menifee, and is now endeavoring to extend the productive area into Morgan county.

The indications do not point to any considerable abatement in oil and gas operations in the various fields of Kentucky during the winter. During the summer and fall much progress has been made in developing the various fields, and conditions now favor greater activity than formerly, the good price commanded by the grades of crude oil and the vast extent of drillable territory holding out inducements now favor greater activity than formerly, the good price commanded by the grades of crude oil and the vast extent of drillable territory holding out inducements now favor greater activity. Some new capital has entered the field lately, and the activity of the old-line operators assures a continuation of drilling for the winter. The Airline Oil Co. and the Union Oil & Development Co. are among new concerns. The former will operate in Barren county and the latter in Union county.

The beginning of the month found about 40 drilling rigs up and in operation in the six established fields of the State. The bulk of work now is being conducted in Wayne county, which is making over half the total production of the State. Lately increased activity has been evident in smaller fields. The six producing fields are turning out on an average 18,000 barrels of oil weekly.

A good price is now commanded by the best grade of Kentucky crude oil, which constitutes most of the output. The Standard Oil Co. quotes \$1.20 per barrel for the best grade, while the Indian Refining Co., an independent concern, quotes \$1.23 for the same grade. The low-grade oil, which does not average over 3000 barrels weekly in output, commands 75 cents per barrel. These prices were established one year ago, and the probability of their continuation for some time to come will cause operators with desirable territory to continue their efforts to bring out a large production. W. S. HUDSON.

In 1906 the mineral production of the United States had a value of \$1,902,505,296, a gain of \$278,576,486 over 1905.

CURRENT EVENTS AS VIEWED BY OTHERS

CHEAP LANDS IN THE SOUTH.

[Charleston News and Courier.]

In a newspaper published in South Carolina last week may be seen an advertisement of a real estate agent offering eight tracts of farm land aggregating 4500 acres in seven or eight different counties in the States of North and South Carolina at an average price of \$8.25 the acre. Some of the lands are priced at \$16 the acre, and some as low as \$3 the acre. Some of the farms have houses and other improvements, but all are located in a region where cotton, corn, all the cereals, fruits and vegetables may be cultivated at a profit.

This advertisement preaches a sermon for white immigration more direct and powerfully appealing than any newspaper or magazine editor's argument is likely to prove. Forty-five farms of 100 acres are offered by a responsible agent at \$8.25 the acre. Every acre is situated in a better climate, we fancy, than is that which the 1,200,000 Europeans who came to this country last year knew at home. Each of the farms with less exertion can be made quite as productive as are 100 acres in Austria, Russia, France or England, and in any one of those countries 100 acres of farm land cost from \$10,000 to \$40,000. A farm no better would cost in Indiana or Minnesota \$5000 and upward.

In the same advertisement the agent offers other lands at \$25, \$50 and \$80 the acre, but to give these cheap lands an equal value requires only that, first, they be settled, that homes be established on them, and second, intelligent cultivation for a few years. In other parts of the South similar advertisements are appearing regularly.

Some of these days the millions whom the ships empty at Ellis Island will awake to the opportunities that are still to be had in the South. Instead of isolated cases of Germans and Scots who bought lands in this State a quarter of a century ago at \$5 the acre, which they can now sell at six or eight times that price, we shall have companies of foreigners coming South to convert great reaches of territory into prosperous white communities. Those who come will not expect to find, as a rule, farms of virgin soil 16 feet deep for sale at a song, but they will be sensible men who are capable of discerning that ordinary thrift and industry will make any of the lands in a region blessed with a salubrious climate and accessible to the best markets valuable after a few years.

If 10 young farmers agree to buy a tract of 1000 acres of land in this State, dividing it into 10 parts and building a home on each, the mere fact of its settlement will double its market value.

POSTAL SAVINGS BANKS.

[Wall Street Summary.]

Postmaster-General Meyer is authority for the statement that postal banks would benefit circulation. Accordingly, his remarks become interesting, as the moment is the psychological for any constructive, conservative and sane suggestion that tends to alleviate the pending stringency. In addition to the excellent service which he believes they would render the nation at large in the cause of thrift and industry, as demonstrated by the experience of almost every country in which they have been established, he holds that for the immigrant nothing better could be instituted, and fortifies his conclusions with unimpeachable statistics. Immigrants, he con-

tends, send to their home in the old country millions of dollars annually by means of postal money orders. During the last fiscal year the total was \$71,000,000. Assuming, probably correctly, that this represents but a small portion of their earnings, and that it was accumulated a little at a time, he points out that a postal savings bank could have handled all such dribbles with great resulting advantage. Residents of the immigrant class entertain a natural suspicion for banks and trust companies, and carry this to such an extreme that they actually send money abroad for deposit in the postal savings banks of their native countries. Owing to their confidence in the Government all such moneys, he believes, would flow into a postal savings bank, and very probably increase, from which they would be led back to the channels of trade through their deposit in national banks under a plan which he is going to submit to Congress, and thus benefit industry and commerce. Certain national banks with whom he has communicated have expressed a willingness to allow 2 or 2½ per cent. on postal savings deposits. That there is a fallow field for the institution of such a system, he argues, is inferable from the additional fact that many money orders are taken out by immigrants payable to themselves, on which investment they receive no interest, leaving the money tied up in the treasury vaults. The attitude of Congress hereon should prove interesting.

PUTTING MONEY IN SWAMP LAND.

[New Orleans States.]

Northern investors are displaying a lively interest in Louisiana lands just now which is considered remarkable, in view of the present financial situation. Some people, however, are of the opinion that the very attention which is being given to Louisiana investments is caused by the flurry in money and stocks; people have lost confidence in other things and are turning their eyes toward the safest investment of all—good farming lands.

Yesterday a party of well-to-do Northern agriculturists, Jerry Woodward of South Bend, Ind.; Haas Brothers of Kalamazoo, Mich., and E. L. Page of Vicksburg, Mich., bought a tract of 575 acres of reclaimed swamp land in Lafourche parish, for which they paid \$50 an acre. This land will immediately be put into cultivation, corn for the first season to get it into shape, and afterwards into peppermint, the growing of which promises to be a very important industry for Louisiana.

It is the intention of the above-named gentlemen to form a company later on to work the land they purchased yesterday, together with other land which they will secure. That they mean business on a large scale is evidenced by the fact that one of the provisions of the deal they made yesterday secured for them the option on 50,000 acres of swamp land which has not yet been reclaimed.

With the money market in the bad shape it is such a purchase as the above is considered remarkable, but it merely goes to show the confidence which Northern people have in the future of Louisiana and its swamp soil.

The purchasers of the Lafourche land announced that they would put men at work on their property right away for the purpose of getting it into shape for next season's crops. Houses will go up on it, and other improvements will be made. The land is situated near Raceland, which

town is already feeling the benefit of swamp drainage in the noticeable decrease in mosquitoes.

Edward Wisner, prominently identified with the swamp reclamation movement in this State, in fact one of its pioneers, made the following rather remarkable statement yesterday:

"I believe that the present financial flurry will benefit Louisiana greatly, so far as its land is concerned, because investors are confident that the value of Louisiana lands will not shrink in value as almost everything else which has been held out for investment has done.

"This confidence in the soil of Louisiana will turn many people from the stock market to the land market. If anyone will take the pains to look it up they will see that people have turned from stocks to land after every panic in the history of the country. All panics in the money and security markets have been followed by increased interest in land as an investment. A man who invests in so-called 'gilt-edged' stocks and then sees them shrink one-third in value will, quite naturally, invest his money next time in land.

"Land, that is, good farming land, is a commodity which is always safe, and, moreover, it shows a steady increase in value from year to year. A man who bought Louisiana land half a dozen years ago is considerably better off today than he was when he made his purchase, just as the man who buys today will, if he holds on to his purchase, be worth more in six years to come. The true value of the soil of Louisiana is just beginning to be appreciated, and an appreciation of its worth means a great rise from present prices. There are no rapid fluctuations in the price of Louisiana or other land, which, in times like these particularly, is a fact which commends land to the investor who wants a safe place for his money."

SATISFACTION IN CANNING.

[Galveston News.]

It has been only a few years since the suggestion of the establishment of canneries in Texas was greeted with the same ominous shake of the head and expressions of doubt that a year or so ago, and even now in some localities, greets the person who suggests the profits to be derived from the establishment of creameries in the State, in spite of the splendid work along that line done by the people in various localities during the last year or so. But the creamery question is another story, and will be given attention at another time.

From Smith, Hopkins, Cherokee, Wood, Rains, Fannin and many other counties of Texas noted for their extraordinary capabilities in the growth of fruits, berries and vegetables come reports of not only the demonstration of the fact that the canning industry possesses vast possibilities for the people of those sections, but they go further and clinch the argument for its practicability and the profitable results to follow its development by showing figures giving the net profits made by canning establishments during last season.

Added to these reports are those from a great number of individuals who have found the machines known as home canners to be of invaluable aid to them in preserving in salable shape the great quantities of fruits and vegetables that would have otherwise gone to waste after the time for profitable shipment had closed.

Then there are others who use machines

of larger size. These are operated by several growers, neighbors, who co-operate in buying the machine and selling their products. By the use of the canner the grower is enabled to "save it all." When the prices become so low as to make shipping at a profit impossible he builds a fire in his canning machine, calls his friends or neighbors to his aid and goes to work. The result is that enormous quantities of fruits and vegetables that would have soon decayed are quickly put into cans bearing neat labels, with the name of the person packing the contents upon them and are offered for sale, and the records show that there is little difficulty experienced in disposing of the goods. This is a most important feature.

This is quite in contrast to conditions existing a very few years ago, when many Texas people were so accustomed to buying canned goods packed a thousand or two miles away that they would buy nothing put up at home, simply assuming that it was impossible for Texas growers to put up fruit as good as that packed in Camden, Baltimore, Cincinnati, Chicago and other big cities of the North and East. But, thanks to the perseverance of a few wise men, to the strenuous campaign by the press, and to the patriotism and home pride of the people, the idea has been entirely overcome. It has been shown beyond cavil that Texas people put up as fine goods as are to be found, and the Texas merchants, finding a demand for Texas-canned goods, are calling upon Texas canners to supply them.

ALABAMA ANXIOUS.

[Mobile Register.]

The merging of the Tennessee Coal & Iron Co. with the United States Steel Corporation is, at this time, of more than passing interest in Alabama. In the discussion throughout the State as to the advisability or otherwise of holding the special session of the Legislature, the commercial bodies and leading men in business and industry having taken the position that the extra session will do more harm than good, it has been pointed out that due consideration has not been given to the corporations that first assisted in the development of the mineral wealth of Alabama. Mr. Henry DeBardeleben of Birmingham, prominent in directing the affairs of the Tennessee Coal & Iron Co., and who has done more than any other man to build up the great iron and steel industry of this State, has called attention to the probable effect of further hostile legislation on that industry and warned the State government that it may kill the goose that laid the golden egg. Capt. A. C. Danner of Mobile has put forth an appeal to the Legislature exhibiting the same fact.

The Tennessee Coal & Iron Co., formed originally to develop the Sewanee coal vein in the Cumberland mountains, acquired valuable mineral property in Alabama and became a pioneer in the establishment of furnaces in the Birmingham district through the influence of Mr. DeBardeleben. The company was promoted by Nashville men, and has been distinctly a Southern corporation since its organization. It has been the principal factor in the development of the mineral resources of this State, because it led the way for others and brought here the attention of investors who have since taken their place in the State's upbuilding. The Tennessee Coal & Iron Co. has felt the effects of adverse conditions in the steel

and iron business, and has experienced the same ups and downs as the State during its existence. The total valuation of all its assets at the present time is about \$37,000,000. It can be readily seen that much of the future prosperity of this State depends upon the further development of this valuable property, and its acquisition by the most powerful steel company in the world is a sign of further development. Having in mind Mr. DeBardeleben's warning to the Legislature, that body cannot afford to ignore the appeals against the imposition of more laws restricting industrial development. The railroads are as necessary to the iron and steel industry of Alabama as the ore itself, for without transportation for the product of the furnaces the ore might as well remain in the ground. If the railroads are handicapped in obtaining adequate equipment to handle the mineral products of the State and so bound up by legislation that their operation becomes unprofitable, all the power of the United States Steel Corporation will be unavailing in the further development of the iron and steel industry in the State.

NEW RAILROAD PLANS.

[Boston Transcript.]

An organization which has come more prominently than ever into public notice the past year is the American Railway Association. One reason why its proceedings have attracted more attention than usual has been their larger openness to the public. At the present time 331 railroads, operating 235,467 miles of line, are members of it, while associated with them are 46 others operating 1457 miles of road. The only important railroad in the country not affiliated is the New Haven, which is at odds with the association because of the imposition of the 50 cents per diem rate on cars delayed over a certain time.

The association does not attempt to deal with general railroad policy, finance or rates. It is to some extent an academic body, making a study of transportation methods, but assuming authority on the largeness of its representation to formulate suggestions, that have the practical force of rules. It has already established standard car service rules and a central bureau at Chicago for the collection of statistics on the movements of cars, from which the efficiency of their use is determined. Its meeting at Chicago last April was one of the most interesting ever held. The congestion of transportation was acute at that time, and that means of relief were the questions receiving the principal consideration.

It was shown that the loose distribution of cars was a fruitful cause of the trouble. Some roads were leaving more cars of other lines on their tracks than they owned, and a compromise rule was adopted, the main provision of which was that a fine of \$5 a car should be imposed upon any railroad loading cars other than its own to be dispatched in a direction away from the home lines. The meeting held recently was tamer in tone. The rule has evidently been frequently violated in the meantime, and small attempt has been made to enforce it. The committee on this matter said "it has endeavored to secure results in this direction by attempting to influence the movement of surplus equipment to roads short of the number of cars that they own, but this experience, it does not feel, has been sufficient to form a basis for a reliable set of rules."

It was expected that the railroads would ratify the five-dollar penalty and compel those weak in equipment to strengthen themselves by purchasing more cars. The time that had intervened was regarded as too short to test the full force of the action, and the condition of the money market also probably inclined the association

to leniency. One good thing for which it is working is the standardization of the systems not only in the matter of rails, but also in the electrical connections, so that there shall be no obstacle to running through trains over different roads. It has the power to effect large betterment, though it is frequently difficult to keep individual members up to the standard of the collective body.

REFLUENT EMIGRATION.

[New York Journal of Commerce.]

It is said that 10,000 third-class or steerage passengers took passage on the steamers going eastward over the Atlantic last week. Most of these were returning emigrants. Probably only a very small proportion are returning to stay in their old homes, but workmen are being laid off by thousands in many occupations, and a large proportion of these are aliens who have come to the country in the last few years of prosperity and high wages. With a winter of idleness or scanty employment before them, and with eastward rates on the steamers very low, they are flocking back with the savings of good times. Unless times should be hard next spring and the prospects for labor poor, most of them will be back and ready for work again and renewed prosperity will bring a multitude of new recruits.

There are some interesting effects of this refluente tide of emigration worth noting. Like the summer tourists, these returning emigrants take considerable sums of money out of the country, which adds its adverse effect to the condition of the exchanges and to the financial situation. On the other hand, it lessens the number of unemployed in the country and gives those who remain a better chance for continued work. It carries a certain influence to the communities from which the immigrants came, derived from their American experience, which has an awakening effect. Those who are able to stay in their old homes with the fruits of industry and thrift gained here may do a good deal to stimulate there the qualities they have acquired under more favorable conditions. It is said that Italy has received much industrial benefit from these returning exiles, who never lose their love for the sunny land.

But if those who have saved enough to stay on the other side and apply their experience to making a comfortable living there fail to return they will stimulate others to seek the same experience and its benefits. The inflow is not likely to be diminished, but to measure accurately the net results our statistics must take account of the outflow. Not only are the arrivals offset by departures, but when the increased immigration is noted in the spring it must be remembered that many of the comers have been here before and are coming back from a trip and a sojourn, like the tourists of the autumn who fill the cabins of the steamers. The ease and frequency and comparative cheapness of the steerage passage causes a tide of emigration as well as immigration, and we have to reckon with both in our calculations.

MERIT SYSTEM'S DEMERITS.

[Minneapolis Journal.]

Civil-service enthusiasts are carried away by phrases at times. The phrase "merit system" has been for years a swelling sound which carried with it all the moral glory of public service. Why doesn't everybody bow down to the merit system, and why are there people who sniff at this sacred ægis when held aloft by a civil-service reformer in immaculate linen? Why do worms of the earth cast aspersions on the merit system? The reformers tell us that it is because of the affections of the lower grade of human animals for the uncleanness of the spoils

system. Exactly and inexactly. This is exactly the result. People are obliged to choose between the merit and the spoils system, and they sometimes choose one, sometimes the other, and never are completely satisfied with either. The civil-service people never admit that there is any flaw in the merit system. Can there be anything better in the world than merit? That depends upon your definition of merit. To many it seems as though the system was on a too narrow basis. The merit of passing an examination is not the only one in the world, but it is the only one in the civil-service world. The boy who passes the highest examinations in a school is not always the most admirable character. He may be mean, sniveling, disgusting like some civil-service reformers, but he has the "merit." He passes the examination. To teach such a boy that he is a superior being, entitled to employment at high wages, to preferment merely because he has the "passing" trick and that he doesn't need to care whether he develops character, generosity, liberality, or pity even, is to carry into life some such hard and fast artificial rule of success as the civil-service system lays down for serving the public.

This is not to say that we shall revert to the spoils system. But we need occasionally to refresh our knowledge of human nature, and when we do that we discover that the spoils system is a merit system, too. It is system which rewards faithfulness, loyalty, dogged persistency. It rewards, it is true, bad men as well as good. It rewards the service without reference to character. It is dangerous in the extreme. On the other hand, the civil-service system rewards the meritorious individual who can pass, and often he never does anything more for the public. Why should he? He has passed and gotten his job, from which he cannot be ousted except on evidence of crime. The public service is spotted with civil-service men who are no earthly good. And the spoils-men know they are no good. But the civil service makes merely fanciful provision for unloading these gentry on their own resources.

Perhaps this will explain why the merit system sometimes makes people tired.

TEACHING CIVIC PRIDE.

[Boston Herald.]

The MANUFACTURERS' RECORD of Baltimore has recently sent Mr. Albert Phenix through the West with the purpose of discovering some of the secrets of the remarkable prosperity and development of that part of the country. One of the characteristics of the West, which every visitor notes, is the ever-present exuberant civic pride. The race of "knockers" is unknown out there; the croakers are not permitted to be heard, if they exist. Every State, every city and every town is to its own "the best ever," and no opportunity is lost to tell the world of the fact. Sometimes it is said that this is Western style, the native "bluff," as if it were something that pervaded the air. But a paragraph in one of Mr. Phenix' letters suggests that the spirit is the product of a consistent purpose and effort to cultivate in every community whatever will help and build up, rather than will tear down and destroy. In other words, the West has discovered the worth of public spirit. This in a measure seems to have been lost in the East. A situation which caught the attention of Mr. Phenix and deserves general consideration was met in Oregon. All the schools of the State have been organized as a "booster's" club. From the primary grades to the State university there is a continuous course of study in the resources of the local community and of the State in general. State officials are charged with the duty of frequent ad-

dressess to the schools upon this topic; business and professional men consider it a duty to perform the same service. The children are induced to write to distant points, repeating the story, and when they leave the schools this impress of civic pride stands large and distinct in the net result of the State's tutelage. The inspiration to boom their State and town is only one of the results of this course of training. The spirit of pride is in itself the best incentive to such citizenship as will justify and preserve that pride, and better cities are the result. How much of that sort of thing is done in New England cities and towns? A vague idea of Pilgrims and Puritans and of Bunker Hill and Concord is driven into the minds of the children by the study of a few pages in the text-books, but the history and traditions of the past are for the most part neglected, while the present, with its achievements and its problems, its resources and its possibilities, are absolutely untouched and left for the uncertain impress of the outside world. Men of the East long for the public spirit and civic pride of the West, but somehow fail to inspire it. Why not take the hint from the Western people and teach it?

ANTIDOTE FOR PANICS.

[Pittsburg Leader.]

The export movement of crops and other products of this country now well under way has turned a stream of gold toward the United States. Europe must have wheat, cotton, meat and other things which cannot be produced on that continent in sufficient quantities to supply the great population and must look to the granary and storehouse of the world for it.

Enormous shipments of gold that will soon reach this country to pay for the necessities of life that have been sent across the ocean and that are to be sent will be immediately available for the commerce of the United States, and business will move along with its old-time smoothness and prosperity.

With the vast resources of the country a serious and prolonged disturbance of business is almost impossible so long as the people devote their attention to honest business and see to it that the few who engage in the other kind of business are properly restrained.

The people of the civilized world must eat and must wear clothes. And there is no country that can feed and clothe them so well as the United States.

Safety vs. Haste in Currency Reform.

Editor Manufacturers' Record:

Twenty years ago life-long students of trade and finance prophetically pictured the exact conditions that exist today in this country as a result of the following:

The folly of attempting to pay off any part of the war debt in the present generation.

The imposition of greater taxation, direct or indirect, than was needed for all legitimate purposes, thus taking from circulation huge sums that were required for business and hoarding it in the treasury.

The failure to enact laws that would ensure an elastic currency.

The Federal tax of 10 per cent. on State bank issues, making such issues prohibitive.

The clause in the national banking law that forbids the loaning of money on real estate.

Our wise President may be depended on to take the proper action at the opportune time. He may think it best to await the regular session of Congress to consider remedial measures, but the country at large will not be satisfied to let another year pass without the enactment of laws that will make the currency more flexible.

The great question of finance is too far-reaching, too intricate to be fathomed by

the masses, but one thing is plain to all of them—it is not safe to go beyond a certain limit in business without ample capital, for the whole fabric tumbles with the first intimation of monetary stringency.

The most experienced financiers have long since pointed out that with the expansion of business provision must be made to meet the needs of such conditions.

Had our Representatives in Congress been patriots and statesmen, instead of mere politicians, relief would have been at hand. Now we can only hope for wisdom born of danger and adversity, and await the slow progress of discussion and legislation.

Great as is the necessity for prompt action, the subject is of too great an import to justify hasty legislation.

The future of the nation largely depends upon the character of such legislation, and it is the devout hope of every true man that only laws bearing alike on all sections will receive the signature of the President.

Much will depend on the South for a proper solution of this great question, for it now supplies exports that returns gold in volumes, exports that have no rivals, with a cotton crop that returned \$3,500,000,000 in six years and estimated to bring \$900,000,000 this season; with Alabama making the world's price on pig-iron; with our South Atlantic coast supplying truck every month in the year; with our forests, the great mainstay of our Eastern country in that line, and all our other vast resources that are making it independent, the South can and should take a leading part in the readjustment of laws that will put this country on a firmer foundation.

Norfolk, Va. ABBOTT MORRIS.

North Carolina's Progress.

With its issue of November 6 the *News and Observer* of Raleigh, N. C., presents a supplement of 76 pages, intended, as it declares, "to give in permanent form some comprehensive idea of what the State is doing in the year 1907 in agriculture, manufacturing and those other recent industrial and economical activities which must round out and utilize the natural sources of a people's wealth." Governor R. B. Glenn has contributed an article on "How North Carolina Is Going Forward." Another supplement also contains articles on tobacco culture and manufacture, cotton and cotton manufacturing, furniture manufacturing, nursery and orchard industry, lumber and timber products, and leaders in life and fire insurance. In all of these it has been sought to present an idea of the work done and the opportunities at hand, at the same time to portray in a measure the spirit and personality of the men whose accomplishments are notable along these lines of commercial and industrial activity. Mr. F. M. Robertson of the United States Department of Commerce and Labor contributes an article on "The Industrial Possibilities in North Carolina," which deals especially with cotton manufacturing, the tanning industry, tobacco manufacturing and furniture factories. The supplement is a valuable one, and reflects credit upon its publishers.

It is stated that the Albany Power & Manufacturing Co. of Albany, Ga., has purchased the Porter Shoals property near Albany and will begin construction work next spring for developing the available power. About 10,000 horse-power is expected to be obtained and transmitted by electricity for lighting and power purposes. Plans and specifications for building dam and power-house are to be prepared by J. E. Sirrine of Greenville, S. C. The Albany Company is at present furnishing 3000 horse-power by electricity from its established plant, which has been operating about two years.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

A ROUTE TO THE SEA.

South & Western Officials on a Tour of Investigation.

President George L. Carter of the South & Western Railway, accompanied by M. J. Caples, vice-president and general manager; Mark W. Potter of New York, chairman of the board, and J. T. Odell, also of New York, has been on a trip to Spartanburg, Laurens, Greenville, Columbia and other points in South Carolina, besides Charlotte, N. C., and elsewhere, considering proposed routes for the extension of the South & Western from Bostic, N. C., to a seaport on the Atlantic coast. Mr. Odell is a railroad man of experience. He was at one time general manager of the Baltimore & Ohio Railroad, and has also held important official positions with other lines. President Carter is reported from Charlotte as saying that the object of the trip was to get Mr. Odell's opinion as to the probable traffic results for the projected extension, and he is furthermore quoted thus:

"We are now considering three possible routes to give us connection with the seacoast from Bostic. One of these is via Gaffney to Charleston; another through Spartanburg, Augusta and Savannah, and the other is down the Wateree country to Charleston. We hold large property interests at Southport, Charleston and Savannah, but are not considering making Southport the sea terminal for our line.

"The line from Kant, Va., on the north, to Bostic is 210 miles long. Rails are now laid for 100 miles, 80 miles of which are in operation. We expect to have the entire line in operation within 12 months.

"Work on laying the rails through the Blue Ridge tunnel at McKinney's Gap will be completed this week. It is possible that we will have the line in operation within about eight months. The total length of the road, after connection is secured to the seacoast, will be about 600 miles, and the cost will be between \$40,000,000 and \$50,000,000. The cost for building the road from Kant, Va., to Bostic was about \$20,000,000, a distance of only 210 miles.

"We will get to Wilmington through the Seaboard Air Line, which runs through Charlotte. This should give direct connection with the Ohio river and Western roads. From Kant, Va., our line will be extended 35 miles to Elkhorn, Ky., to get connection with the Chesapeake & Ohio."

President Carter is further reported as saying that work will be continued on the construction of the line notwithstanding financial conditions, although he expects the money stringency to affect every business interest and every home in the country.

The South & Western Railway, as heretofore announced, is designed primarily as a coal road, and will develop the mines in the Clinchfield region around Toms Creek, Va.

ELECTRIC COAL LINE.

Barges Also to Handle Mine Output from Tuscaloosa to the Gulf.

The Birmingham Railway & Navigation Co. of Birmingham, Ala., recently incorporated to carry out the plans of the Tidewater Development Co., promoted by J. M. Dewberry, is reported to be starting its important work at Tuscaloosa, Ala., where the Tuscaloosa Belt Railway was, it is stated, recently acquired. The plan includes an electric railway from Gadsden, Ala., via Birmingham to Tuscaloosa, Ala.,

and in connection with this railroad a barge line is to be established on the Warrior and Tombigbee rivers to handle coal from the Birmingham and Warrior coal fields to Mobile and New Orleans, the latter point to be reached by way of the Lake Borgne canal. The Tuscaloosa Belt Railway affords a desired connection to the Warrior river at Tuscaloosa.

President Dewberry is reported as saying that contracts to convert the Tuscaloosa Belt Line from steam to electricity have been let, and this work will be completed in a few months. It is further said that the plans have been financed, and that work on the Birmingham end of the road will follow that at Tuscaloosa.

NEW WAYCROSS SHOPS.

Atlantic Coast Line's Large Plant Nearly Ready for Operation.

The MANUFACTURERS' RECORD is informed that the new shop buildings of the Atlantic Coast Line at Waycross, Ga., have been completed by the contractor, the Penn Bridge Co., and the machinery is now being installed, most of it being already in place. The machinery is to be operated by electricity, and it is expected that the shops may be put in use about January 1.

The buildings are as follows: Storehouse and office, 206x50 feet; oilhouse, 60x30 feet; pattern shop, 105x45 feet; foundry, 164x84 feet; machine-erecting shop, 317x174 feet; blacksmith and boiler shop, 317x74 feet; coach shop, 317x104 feet; paint shop, 317x164 feet; drykilo, 85x25 feet; cooling shed, 45x26 feet; power-house, 140x54 feet; planing mill, 188x74 feet; dry-lumber shed, 100x20 feet; freight car repair shed, 360x80 feet; also a 12-stall roundhouse and turntable. The power-house chimney, built by Alphonse Custodis of Paris, is 183 feet high. There have also been built two large transfer pits 360x77 feet, one for locomotives and the other for passenger cars. There are two water tanks of 50,000 gallons capacity each. With the exception of the lumber storage sheds, all the buildings are of steel, concrete and brick, with tile roofs. There are ample skylights, and provision is made for a large number of electric lights both within and without the shops. There will be at least 11 miles of yard tracks in and around the buildings.

The work for these shops began March 11, 1906, and in their construction about 4,000,000 bricks were used, besides 7500 yards of concrete and more than 1000 tons of steel.

New Railroads Chartered.

Among the new railroads recently incorporated or chartered are the following:

The Alleghany Coal Railroad Co. in West Virginia, to build a line from Fairmont southwest about 60 miles through Marion, Harrison, Lewis and Gilmer counties to a point at or near Glenville, on the Little Kanawha river. The capital is \$100,000, and the incorporators are Granville M. Dodge, Adolph Lewinsohn and Uriah Herrman, all of New York city; Fairfax S. Landstreet of Davis, W. Va., and O. Harry Smith of Baltimore, Md. The principal office of the company is at No. 1 Broadway, New York city, where the office of the Landstreet Coal & Coke Co. is also situated.

The Red River Railway Co., capital \$5,000,000, chartered in Oklahoma to build 200 miles of line from the Texas boundary north of Bonham, Texas, to Oklahoma City, with numerous branches. It is intended to finally make the road an electric railway. Headquarters at both Durant and Oklahoma City. The incorporators are George F. Robertson of Atoka, I. T.; T. H. Bayless of Durant, I. T.; F. P. Kibbey of Byers, I. T.; J. W. Hocker of

Purcell, I. T.; Albert Rennie of Pauls Valley, I. T.; E. M. Abernathy, S. C. and F. J. Hawk of Lexington.

The Rapid Transit Interurban Company, chartered in Oklahoma to build a line from Muskogee, I. T., southwest 137 miles via Tecumseh, O. T., to Chickasha, I. T., with a cross-line northwest from Tecumseh to Guthrie, O. T., and south from Tecumseh to Sulphur, I. T., making a total of 277 miles. Headquarters at Tecumseh, O. T.; capital \$2,500,000. The incorporators are John A. Clark, L. B. Mitchell, J. W. Saxon, G. M. Cisna, T. J. Ray and M. H. Tennon, all of Tecumseh.

Thomasville to Delph.

The Florida Central Railroad Co., according to an official letter received by the MANUFACTURERS' RECORD, is continuing construction on its line from Thomasville, Ga., southward about 50 miles to the sawmill town of Delph, Fla. The road has been under construction for six months. Contracts for construction are all let and are well under way, and all the necessary equipment for the present has been purchased. The work is in charge of Mr. Z. Middlebrooks, general manager, with headquarters at Thomasville, Ga.

The territory traversed by the line consists of timber lands belonging to the financial interests that are building the railroad as well as a good section of farming country. There will not be any town of consequence on the new line except neighborhood settlements. The road has connections at Thomasville with the Atlantic Coast Line and also with the Atlanta, Birmingham & Atlantic Railway. It will cross another branch of the Atlantic Coast Line four miles south of Metcalfe, Ga., and will also cross the fourth division of the Seaboard Air Line two miles east of Chaires, Fla.

New Equipment.

The Pennsylvania, it is reported, will receive by January 1 a total of 100 new locomotives—50 from the American Locomotive Works and 50 from the Altoona shops of the railroad company. The Pressed Steel Car Co. is also delivering to the railroad 400 flat cars.

The Southern Railway, it is reported, contemplates the purchase of 200 locomotives.

The Atlanta & Western Railway is reported to have ordered from the Lenoir Car Co. 60 box cars.

The Kanawha & West Virginia Railway, according to a report, contemplates buying more than 700 freight cars.

The South Georgia Railway proposes to buy 100 freight cars.

The Rodger Ballast Car Co. is reported to have received an order from the San Antonio & Aransas Pass Railway for 25 Hart convertible cars.

The Nashville, Chattanooga & St. Louis Railway is reported in the market for 100 composite hopper coal cars of from 80,000 to 100,000 pounds capacity.

Norfolk & Southern's Progress.

The Norfolk & Southern Railway Co. has, it is reported, now in operation 400 miles of its total of 600 miles of line, which is principally in North Carolina. The new mileage is also reported to be about completed and may soon be operated. The roads are chiefly lumber lines in the eastern part of North Carolina, and the work of development which the company is doing is important. It was recently decided to issue \$25,000,000 of 5 per cent. bonds, and the John L. Roper Lumber Co., which is owned by the same interests, has also agreed upon an issue of \$10,000,000 of bonds.

One of the most important pieces of work which the company has on hand is

the building of a viaduct five and one-half miles long across Albemarle Sound from Edenton to Mackey's Ferry, N. C., this bridge being designed to connect the northern and southern divisions, which are now connected only by ferry.

Charleston's New Station.

The new union station at Charleston, S. C., which is used by the Southern Railway and the Atlantic Coast Line, has been opened for business. The architecture of the building is of the Spanish mission style, and it presents a very handsome appearance. The edifice is built of light-colored brick ornamented with hardwood, and the roofs are of red tile. The interior is handsome and commodious. The upper floors are devoted to railroad offices. The train shed is 400 feet long, and there are tracks to accommodate six trains of 9 or 10 cars each. The platforms are of concrete. The total cost of the station, including tracks, is about \$230,000. The contractor for the building was Grant Wilkins of Atlanta, Ga.

Reports of Railroads.

The Gulf & Ship Island Railway Co. reports through Flisk & Robinson of New York for September, 1907, total operating revenues, \$191,350; net, \$43,998. For the three months ended September 30 total operating revenues, \$628,978; net, \$161,943. For the same period of last year the total operating revenues were \$579,530 and the net \$139,860.

The Louisiana & Arkansas Railway reports through the same firm for September total operating revenues, \$110,899; net, \$39,904. For the three months ended September 30 total operating revenues, \$349,355; net, \$133,684. For the same period of last year the total operating revenues were \$314,000 and the net \$106,853.

Seaboard Improvements.

The Seaboard Air Line is improving its road between Columbia, S. C., and Hamlet, N. C., 96 miles, principally by filling in some long trestles. It is stated that in order to hasten completion of the line several years ago considerable trestling was put in, and now this will be filled in, excepting at such points as crossings of streams. Many small trestles will be replaced by arches of brick or other material. The company is also pushing the work of improvement on the line between Hamlet and Wilmington, N. C., which is being laid with heavier rails.

Work on the "Cotton Belt."

Mr. F. H. Britton, vice-president and general manager of the St. Louis Southwestern Railway, is reported as saying that preliminaries are now being completed for the construction of the proposed new freight terminals at Fort Worth, Texas, and that the work will proceed as rapidly as possible. The improvement plans of the company will be carried out as projected, including the ballasting of the Texas lines, so that the construction forces of the company will be fully employed.

Railroad Notes.

The Piedmont Air Line announces the appointment of Karl E. Hurlburt as traveling freight agent, with office at 271 Broadway, New York city, to succeed C. S. Metzger, promoted.

The Travelers' Railway Guide for November, 1907, has been increased in size by many pages to celebrate its fiftieth anniversary. A very interesting feature is the reproduction of a number of old railroad maps showing the small beginnings of some of the great systems of the United States. Considerable other historical matter relating to railway and hotel business

is presented, besides the usual features of the Guide.

Mr. John C. M. Day writes from Clay City, Ky., to the MANUFACTURERS' RECORD that it was intended to make a survey this fall and next spring and summer to build the proposed extension of the Mountain Central Railway from Campton to Hazel Green, Ky., but on account of the financial conditions at present the work will hardly be undertaken until money is a little more plentiful.

A dispatch from Stanton, Texas, announces that construction has begun there on the West Texas & Northern Railway, promoted by S. G. Bondurant, whose plans provide for building a line from Amarillo, Texas, southward to the Gulf of Mexico, about 500 miles. The O'Donnell Contracting Co. will, it is reported, do the work at Stanton, and contracts are being let on other sections.

The Alexandria Electric Street Railway Co. of Alexandria, La., is reported to have been reorganized by the stockholders who recently acquired control of it. The directors are C. M. Waters, president; M. L. Alexander, vice-president; A. Albert, Benjamin Weil, W. B. Stewart, Dr. J. A. White and T. G. Bush. Ray Albert is secretary and treasurer, and W. F. Joffrion of Moreland, La., has been elected manager.

FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

French Demand for American Products.

L. Delery, 50 Rue Sainte, Marseilles, France:

"I have been in business here for the past seven years, am an American-born citizen, and can give as references the leading local firms. Mr. Skinner, our American consul, and as banking houses the Credit Lyonnais and Societe Marseillaise. I would be pleased to receive good business proposition from any American manufacturer or producer of a good and serious article, there being a large field for many an American product, which products are, as a rule, generally well appreciated here."

Cotton, Felt, Saws, Files.

Harald Michelsen, Post Box 65, Christiania, Norway:

"I beg to mention that I should much desire to represent American firms offering raw cotton, cotton felt for papermakers, saws and files. I shall much appreciate being put into communication with manufacturers in these lines."

Distillation of Alcohol and Denaturing. By F. B. Wright. Second edition, revised and greatly enlarged. Published by Spon & Chamberlain, 123 Liberty street, New York city. Price \$1 net.

This volume is a practical handbook on the distillation of alcohol from farm products and its denaturing for use in farm engines, automobiles, heating and lighting, etc. The subject-matter has been divided into 14 chapters, each covering some particular branch of the industry. These include alcohol—its various forms and sources, the preparation of mashes and fermentation, distilling apparatus, modern distilling apparatus, rectification, malting, alcohol from potatoes, alcohol from grain, corn, wheat, rice and other cereals, alcohol from beets, alcohol from molasses and sugar-cane, alcoholometry, distilling plants and their general arrangement and equipment, denatured alcohol and denaturing formulae and the denaturing regulations in the United States.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Building Addition at Cumberland, North Carolina.

Construction is progressing on the addition to the Houston mill at Cumberland, N. C. It involves the erection of an additional mill building of reinforced concrete, 371 feet long by 71 feet wide, with basement and a 15-foot pitch to the first floor. Upon completion the building will be equipped with 5000 spindles and accompanying machinery for the production of cotton yarns, about doubling the present output. The plant will be operated by water-power, the wheel installation furnishing 250 horse-power. Messrs. J. Fred Houston & Co., offices in Provident Building, Philadelphia, Pa., own and operate the mill, and Houston Dunn, Drexel Building, Philadelphia, is their engineer in charge of the improvements. The MANUFACTURERS' RECORD announced in August the firm's decision to undertake this extension of its facilities in North Carolina.

The Cheraw Cotton Mills.

Messrs. A. G. Kollock, H. D. Malloy and R. T. Caston have incorporated the Cheraw Cotton Mills of Cheraw, S. C., for the purpose of building a plant of 10,000 spindles and 300 looms to manufacture cotton cloth. They plan to effect organization with James Dillingham of 256 Church street, New York, president, and A. G. Kollock of Darlington, S. C., treasurer-manager. J. E. Sirrine of Greenville, S. C., will be the architect-engineer in charge of building the mill, and electricity will probably be used for motive power. It is expected that the electricity will be obtained from the Rockingham Power Co., now building its water-power electrical plant near Rockingham, N. C. If the Rockingham company does not extend its wires to Cheraw, the Cheraw Cotton Mills will use steam power.

Big Cotton Mill Contemplated.

Capitalists of North Carolina and Pennsylvania contemplate forming a corporation with large capital to build a big cotton mill in the neighborhood of Whitney, N. C. They propose to use electricity for power, obtaining the supply from the transmission of the Whitney Company, which expects to be furnishing 40,000 horse-power next year. Full particulars of the Whitney water-power-electrical developments have been presented previously by the MANUFACTURERS' RECORD. The present status of the plans for building the mill do not warrant mentioning the names and addresses of the principals in the enterprise, but when definite arrangements have been completed full particulars will be announced.

Hanover Manufacturing Co.

The Hanover Manufacturing Co. of Concord, N. C., has been incorporated, with capital stock of \$150,000, to manufacture cotton goods. Its incorporators are Messrs. Lewis W. Brander of Concord, William M. Greenwood and Walter S. Savage of New York.

The Blacksburg Mills.

The Blacksburg Mills of Blacksburg, S. C., has been organized for the purpose of building a cotton factory, the organ-

izers being Messrs. G. Lang Anderson and James P. Gossett of the Williamston Mills, Williamston, S. C. They will at once give consideration to details. Mr. Anderson was lately reported by the MANUFACTURERS' RECORD as proposing to organize a mill company at Blacksburg.

Textile Notes.

The Franklin Cotton Mills of Concord, N. C., is reported as planning to double its present plant of 7000 spindles.

Messrs. J. S. Shingler, T. J. Shingler, W. C. Powell and R. E. Royal of Ashburn, Ga., will organize a company capitalized at \$250,000 to build a cotton mill.

Mr. D. A. Tompkins of Charlotte, N. C., is reported as negotiating with a Fall River (Mass.) braided-tape manufacturer relative to establishing a tape mill in Charlotte.

It is reported that the Whittaker Cotton Mills of Blacksburg, S. C., has decided to double its present equipment of 5000 spindles and awarded contract for the new machinery.

The Harriss Manufacturing Co. of Rock Hill, S. C., is reported to have secured plans and specifications for the erection of a 75x300-foot building for its cotton-yarn and collar-pad mill, recently announced.

The Winona Cotton Mills of Winona, Miss., is reported as having decided to expend \$12,000 for new additional machinery in order to increase manufacturing facilities. The company's present equipment is 5000 spindles and 200 looms.

It is reported that H. C. Gildard of Knoxville, Tenn., is planning the organization of a company with capital stock of \$150,000 to build a mill of 9000 spindles and 200 looms at Morristown, Tenn., for manufacturing cotton cloth for the rubber and linoleum trade.

Cement Exhibit.

A large exhibition of cement and its possibilities, together with all of the latest improved machinery and equipment used in the manufacture both of cement and its many products, will be held in the Coliseum in Chicago from December 17 to 21. The scope of the display is shown by the following exhibit departments: Cement, concrete mixers, block machines, brick machines, cement-pipe machines, cement-tile machines, cement-post machines, manufacturers of reinforcing metal, cement publications, books, schools, reinforcing contractors, concrete-block contractors, architecture, testing machinery, testing laboratories, railroad displays, sheet piling, forms, aggregates and sand. The exhibition is being held under the auspices of the Cement Products Exhibition Co., which is composed of a number of Western cement manufacturers. This is expected to be a permanent organization, and similar exhibitions will be held annually. The company has opened offices at the New Southern Hotel, Michigan boulevard and 13th street, Chicago, with L. L. Fest as manager, from whom applications for space and other information relating to the exhibit may be obtained.

Progress at Denison.

[Special Cor. Manufacturers' Record.] Denison, Texas, November 10.

The Denison Board of Trade has elected Messrs. J. B. Poston, president; P. J. Brennan and J. P. Haven, vice-presidents; T. W. Larkin, secretary; W. G. Meginnis, treasurer. This organization has made a great record during the past year. The population has steadily increased, and there is a decided gain in postal receipts, bank deposits and building operations. Several industries have been established and several more are in prospect.

MINING**IN BIG SANDY FIELDS.****Pennsylvania Operators Working in Kentucky Coal.**

Experience in any line of manufacturing or business is the basis for success in any new field. Pennsylvania, with its large area of bituminous coals, has developed many coal operators of ability, and they are using their experience and capital to increase their fortunes in new coal fields.

The New River and the Pocahontas fields were largely developed by men from Pennsylvania, and with the extension of the Big Sandy division of the Chesapeake & Ohio Railway into the coal fields of the Big Sandy valley in Eastern Kentucky the Pennsylvania operators have turned their attention to this new field and have already become the leading factors in the developments now taking place.

Prominent among the Pennsylvania operators well known in the coal business of the country is Morris Williams, president of the Susquehanna Coal Co., who, with associates from Wilkes-Barre, Pa., have developed a large operation under the name of the Northeast Coal Co. near Paintsville, Ky., from which they are now shipping several hundred tons of block coal a day, which is meeting with high favor in the Southern markets. They are putting in high-class buildings of a permanent nature, and will soon have a 1000-ton-a-day operation.

Farther up the river on Marrowbone creek Edward Brennan, president of the Greenough Coal Co., Shamokin, Pa., and his associates, including many of the leading coal men of Shamokin, have developed a lease on the property of the Big Sandy Company under the name of the Greenough Coal & Coke Co. They are now shipping about 300 tons a day of Elkhorn smokeless coal, and have their mine on a paying basis. Their output will soon be increased to 500 tons a day, and with the development of a lower seam on their property they will have an output of 1000 tons a day. They are bringing to this new operation that experience and skill which have made the Greenough Coal Co. of Shamokin one of the most successful of the independent anthracite operations in the anthracite fields.

On the same creek the Beurys of Shamokin and Philadelphia, who have operations in the New River and Pocahontas fields, are developing two leases on the property of the Big Sandy Company known as the Henry Clay Coal & Coke Co. and the Big Branch Coal & Coke Co. The Henry Clay Coal & Coke Co. is already shipping a carefully-prepared output of Elkhorn coal, and the Big Branch Coal & Coke Co., which is putting in a retarding conveyor and other machinery, will be ready to ship about the first of the year.

Lower down on Marrowbone creek a group of Connellsville operators, including Mr. Deffenbaugh of the Edenborn Coke Works, have developed a lease on the property of the Big Sandy Company known as the Marrowbone Coal & Coke Co. It is their intention to develop this lease as a coking proposition. The coal, having been tested by them in their ovens in the Connellsville region and found to make a satisfactory coke, will compare well with the Connellsville standard.

The Pike Consolidated Coal Co., another lessee of the Big Sandy Company, is in charge of Mr. E. F. Saxman, the well-known coke operator of Latrobe, Pa., who, with Roy W. Hayes as superintendent, is putting out about 500 tons a day from the two mines of this company, and by the first of the year will have the mines developed to a capacity of 1000 tons a day.

The importance to these Southern fields

of the advent of the Pennsylvania coal operators of the best type is very great, for they bring with them the technical knowledge of coal mining and coke making which is the result of many years of practical experience, and the development of these Southern fields will begin at the same point at which the Pennsylvania operations have arrived during the past 50 years, and their example inspires confidence among Southern men to go into the coal business and to share in the profits which will flow from these Southern fields in the same measure as they have flowed so generously from the Pennsylvania fields.

The coal market is growing, and growing rapidly, and the product of the Southern fields will be required to satisfy the demands made by the growing commerce and industries of the country.

To Develop West Virginia Coals.

The Pemberton Coal & Coke Co. of Pemberton, W. Va., has been incorporated with a capital stock of \$50,000 by Messrs. Harry W. Althouse and S. D. Kynor, both of Pottsville, Pa.; M. K. Watkins and W. A. Phillips, both of Mt. Carmel, Pa., and G. S. Linderman of South Bethlehem, Pa. Writing the **MANUFACTURERS' RECORD** with reference to the enterprise, Mr. Althouse states that the company will develop Pocahontas coals in Raleigh county, West Virginia, on the new extension of the Chesapeake & Ohio Railway up Piney river to the Winding Gulf. The property comprises about 2500 acres and contains two Pocahontas seams, one of them above water-level. Mr. Althouse is the consulting and constructing engineer.

September Coal Shipments.

Tidewater shipments of coal from West Virginia and nearby fields for September, 1907, show an increase of over 300,000 tons as compared with September, 1906. The following indicates the shipments by regions: Clearfield, 644,983 tons; W. of Latrobe, 104,426 tons; Georges Creek, 110,548 tons; Tunnelton, 15,142 tons; New River, 213,659 tons; Kanawha, 3985 tons; Pocahontas, 170,708 tons; Tug River, 18,032 tons; Clinch Valley, 10,387 tons; Thacker, 4925 tons; Beech Creek, 196,683 tons; West Virginia, 39,889 tons; Fairmont, 138,771 tons; Meyersdale, 205,463 tons; Youghiogheny, 12,680 tons.

The McGraw Coal Co.

The McGraw Coal Co. of Grafton, W. Va., has been formally organized by the election of a board of five directors and the following officers: President, John T. McGraw, Grafton, W. Va.; vice-president and general manager, John F. Brophy, Frostburg, Md.; secretary and treasurer, John Keating, Cumberland, Md.

Kanawha Loading.

Shipments of coal from the Kanawha coal field for October, not including river loading, amounted to 595,200 tons. Coke shipments for the same month amounted to 10,680 tons, loaded at the following points: Windsor, 2100; Crescent, 900; Great Kanawha, 1920; Powellton, 3930; St. Clair, 1830.

The Arkansas Fuller's Earth Co. of Little Rock, Ark., has been incorporated with a capital stock of \$25,000 to develop about 360 acres of fuller's earth bearing land in Saline county. Incorporators of the company are Messrs. F. W. Duttlinger, W. D. Kennedy, Charles E. Lenz, Jay Kerr and Harry H. Myers. It is stated that F. W. Duttlinger will be the president.

More than 200 Kentuckians have accepted appointments as delegates to the Kentucky State development convention, which will meet at Louisville November 19-21.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Mississippi Pine Association.

Mr. E. A. Walker of Hattiesburg, Miss., secretary of the Mississippi Pine Association, has issued a report of the operations of 100 mills during September, which shows that the total shipments, interior and local, and not including exports, were 19,747,078 feet, a decrease of 27 per cent. as compared with August. The total sales, interior and local, and not including export, were 21,120,758 feet, a decrease of 29 per cent. as compared with the preceding month. Exports of lumber show an increase, however, the export movement for September being 19,218,812 feet, an increase of 18 per cent., while the sales contracted for export during the month were 19,401,028 feet, an increase of 21 per cent. compared with the previous month. It is shown that during the month 75 sawmills were operated an average of only 11 2-5 days, and 49 mills were operated an average of 16 2-5 days during the month preceding.

The decreased production of the mills is attributed in a measure to a slow market, but more especially to a scarcity of cars. Sixty-eight sawmills reported that they had on hand ready for shipment at the end of September a total stock of 84,648,764 feet.

Lumber for Panama.

Over 6,000,000 feet of yellow pine lumber or Douglas fir is needed by the Isthmian Canal Commission, and bids will be asked within the next few days, according to information received by S. E. Redfern, local purchasing agent at New Orleans. Mr. Redfern was notified that a circular will soon be issued for 6,028,593 feet board measure, which will be required for six months' supply for the various departments on the Isthmus and to replenish the stock carried in the Lirio and La Boca lumber yards.

Purchased 36,000 Acres of Timber Land.

An important timber-land purchase in Virginia last week involved 36,000 acres of land in Russell county sold by E. G. Boyd of Roanoke to the Grand River Lumber Co. of Pittsburg, Pa. The purchase price is said to have been \$350,000, and it is understood a railway will be constructed promptly in order to provide the transportation facilities needed to ensure the early development of the timber.

To Develop North Carolina Timber.

Baltimore and Philadelphia capitalists are negotiating for the purchase of five tracts of timber land, aggregating about 150,000 acres, in North Carolina. They propose to organize a company capitalized at \$1,000,000 or more and to develop the property by logging operations and the erection of lumber mills. Messrs. Carlington & Carlington, 110 East Lexington street, Baltimore, Md., represent the principals in the enterprise.

Mop-Handles Wanted.

Mr. W. H. Zachry of 77 Glenn street, Atlanta, Ga., invites prices on mop-handles by the carload.

Wants 300,000 Hardwood Staves.

The Western Naval Stores Co., Aldridge, Texas, wants to buy 300,000 hardwood staves from barrel manufacturers. These staves are wanted for making rough barrels 34 inches long, knot or worm holes not being objectionable. Staves which will not answer for oil or whiskey barrels will answer the company's purpose. The

company's telegraph address is Rockland, Texas. L. M. Autrey is general manager.

Lumber Notes.

The Ashley-Price Lumber Co.'s new sawmill at Douglas, Ga., has been completed and is in operation. It has a daily capacity of from 50,000 to 75,000 feet of lumber.

The Ayden Lumber Co. of Ayden, N. C. is reported to have purchased from Messrs. R. H. and A. B. Garriss the timber rights on a tract of gum timber land estimated to contain 1,000,000 feet.

A dispatch from Orange, Texas, states that Capt. Green Godwin of the tug Frankie has contracted with the Louis Werner Stave Co. to tow to Orange from points along the upper Saline river 100,000 white oak staves for export to France.

A report from Moss Point, Miss., states that the sawmills in that vicinity, which have been idle owing to the dull European market, are in full operation now, some of them running overtime in order to meet the demand for lumber. The mills are said to be well supplied with logs.

Mr. S. H. Morris of Norfolk, Va., has been elected secretary of the North Carolina Pine Association, succeeding John R. Walker, who recently resigned. Mr. W. T. Currie of Enfield, N. C., succeeds Mr. Morris as chief inspector of the association, the changes to become effective December 1.

Texas Fire-Brick.

Situated six miles from Elgin, in Bastrop county, Texas, is the plant of the Texas Fire-Brick Co., organized last year by Messrs. Shwarts Bros. of Corsicana to utilize Texas raw material in Texas industry. The Messrs. Shwarts Bros. are well-known business men who have made a study of manufacturing in all its important details. Their cotton mill at Corsicana is a successful plant, and they have long since believed that there is great possibilities in the manufacture of brick, as well as in fabrics. They were quick to realize the wonderful possibilities of the remarkable beds of clay on the lands which they have leased near Elgin, and have determined to spare neither work nor expense in making their brick plant a model one in every particular. The land leased by the Messrs. Shwarts Bros. is a tract of 2300 acres, which formerly belonged to Capt. C. Lasher, and lies about six miles east of Elgin, on the Missouri, Kansas & Texas Railway. The wonderful clay necessary to make brick at Elgin has been recognized as one of the best clay sections in the State or in the South.

The plant covers from 15 to 20 acres, and is well laid out in all details for the manufacture of this product. Commodious and well ventilated houses have been built for the use of help near the place, and particular attention has been paid to the comfort, convenience and health of the laborers. The capacity of this company is 7,000,000 brick per annum, while the output per day sometimes exceeds 20,000. There are some 30 hands employed, and the enterprise represents an investment of over \$100,000. The officers of this company are Kal Shwarts, president; Joseph Shwarts, vice-president, and W. D. Nolen, secretary and treasurer.

Motive Power Needed.

Mr. John B. Atkinson, president St. Bernard Mining Co., Inc., Earlington, Ky., writes to the **MANUFACTURERS' RECORD**:

"The trouble seems to be want of power by the railroads. Business is good, and cars would, if moved promptly, be sufficient for the business. A few mines are short of labor, but men are rapidly filling up the vacant places."

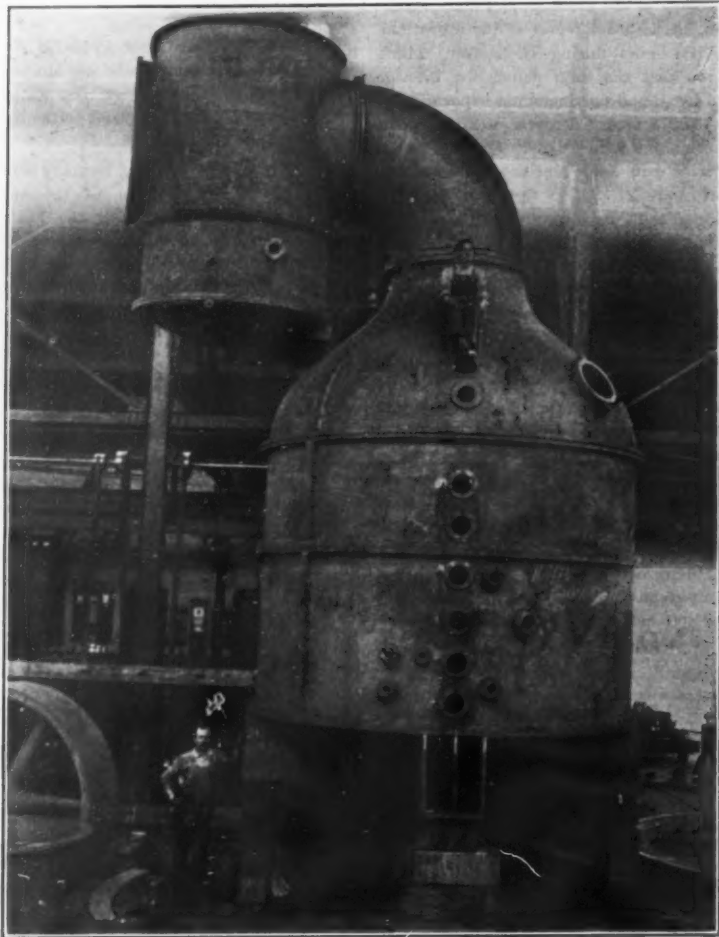
MECHANICAL

Heavy Machinery from Atlanta Shops

Southern shops are producing some important and heavy machinery. Their facilities are well indicated in the two ac-

the Francisco Sugar Co. of Guyabli, Cuba, and 143 South Front street, Philadelphia.

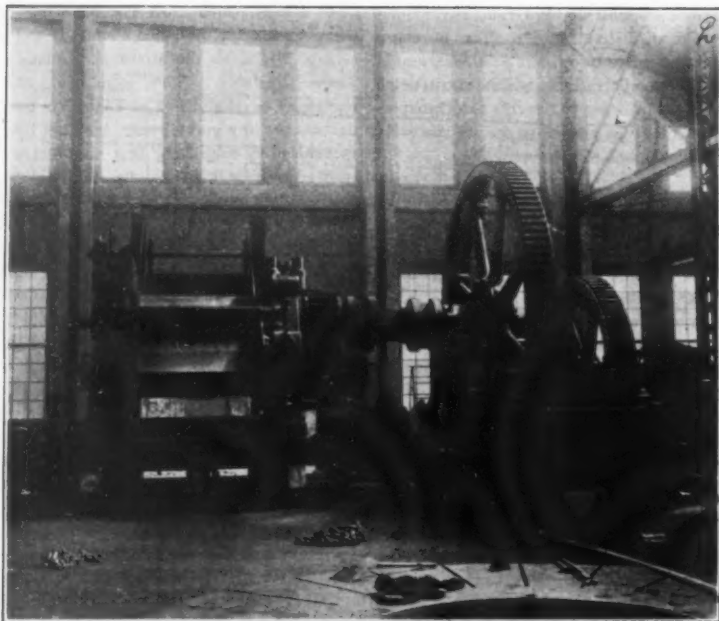
On Monday, October 14, this machine was standing in the shops awaiting the inspection of the owner. On Monday afternoon inspec-



BIG VACUUM PAN BUILT AT ATLANTA.

companying views, showing a big vacuum pan and a cane mill built by the Fulton Foundry and Machine Works of Atlanta, Ga. The pan is one of two 12½-foot pans built for the Guanica Centrale of Guanica, Porto Rico, and 44 Wall street, New York. An idea of the size of the pan is obtained

tion was completed and the machine accepted, and the Fulton company was instructed to disassemble same and prepare it for export shipment. By Wednesday afternoon the entire machine (weighing about 400,000 pounds) had been disassembled, boxed, crated and marked, and



BIG CANE MILL BUILT AT ATLANTA.

by comparing it with the figures of the men pictured. The over-all height is about 32 feet.

The cane mill is of the Stillman type, 34x72 inches, complete with gearing, hydraulics, etc., and was manufactured for

manifests were prepared for export shipment and the equipment was loaded on eight cars for transfer to ship at Mobile, Ala. Through the co-operation of the Atlanta & West Point Railway, the Western of Alabama Railway

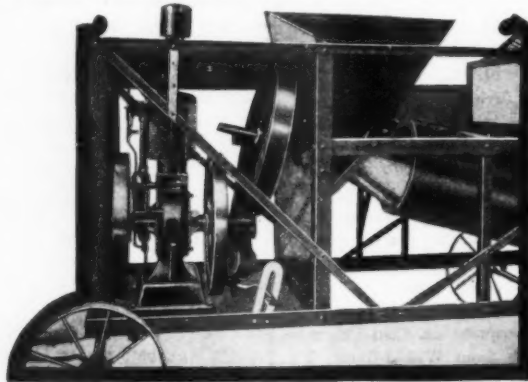
and the Louisville & Nashville Railway arrangements were made to handle this shipment through as a solid train, which resulted in record time from Atlanta to Mobile and prompt loading upon the Munson Line steamer "Min."

Southern manufacturers of sugar-mill machinery have suffered to some extent because of the impression that has prevailed in the minds of purchasers that they could not reasonably expect promises of delivery to be kept, and when such promises were kept they could not depend upon

This locomotive is built in sizes from 10 to 30 tons with two motors, and in larger sizes with three and four motors, arranged with rigid frame or with trucks having flexible wheel base, depending entirely on the conditions.

Demorest Little Giant Concrete Mixer

In view of the extensive use being made of concrete in construction work, it is of timely interest to call attention to the Demorest Little Giant concrete mixer, an illustration of which is herewith presented.



DEMOREST LITTLE GIANT CONCRETE MIXER.

transportation companies giving such service to the coast as would insure sailing of the vessels in which space had previously been reserved. In entering this field of heavy sugar-mill machinery the Fulton Foundry and Machine Works' effort has been to counteract this, and the statement as to the cane-mill shipment seems to prove Atlanta can expect the fullest sort of co-operation from the transportation companies.

A 25-Ton Switching Locomotive.

An accompanying illustration shows a view of a 25-ton switching locomotive built by the Jeffrey Manufacturing Co., Colum-

This machine is made for either hand or power operation, and is portable.

Both machines consist of two hoppers, one for cement, the other for sand and crushed stone or gravel, a water tank (with feature for accurately regulating the water flow to almost a drop) and the mixing drum.

The cement is put into one hopper, the sand and crushed stone or gravel into the other hopper and water into the water tank. The machine is then set in operation by hand or engine. The contents of both hoppers being agitated by ingenious devices in their interiors, run through to the feed belt and are carried into the mix-



A 25-TON SWITCHING LOCOMOTIVE.

bus, Ohio, for use in handling freight cars for the Cerveceria Cuauhtenoc Brewery of Monterey, Mexico. This style locomotive takes the same electrical equipment as the mine type, the only change being in the side and end frames and the addition of a platform and suitable cab to accommodate the conditions incident to surface work. The motors are of the waterproof steel-frame type, having drum-wound armatures, laminated polepieces, oil lubrication with auxiliary grease boxes and liberal wearing surfaces.

ing drum and dry mixed (the only successful method). After being thoroughly dry mixed, the water carried from the tank to the end of mixing drum wets the mixture into perfect concrete.

The regulating of each hopper has been obtained to the perfection point—little gates which can be regulated accurately (while the machine is in operation) giving exactly the proportion of cement desired. The same device is attached to the hopper containing the gravel, sand and crushed stone.

The cement, sand and crushed stone, whichever are used, are dry mixed thoroughly before they are wet. The water comes in contact with the dry mix at the end of the drum. A rim here holds the heavier portion of the mix, such as crushed stone and gravel, from being thrown out too soon, until the water thoroughly permeates the whole, and it is discharged a perfect concrete of any consistency desired, as determined by the water supply.

The mixer illustrated is operated by a Brown air-cooled gasoline engine. These concrete mixers are built by the Ballou Manufacturing Co. of Belding, Mich., which issues illustrated pamphlets describing the machines in detail.

Bottle-Conveying System.

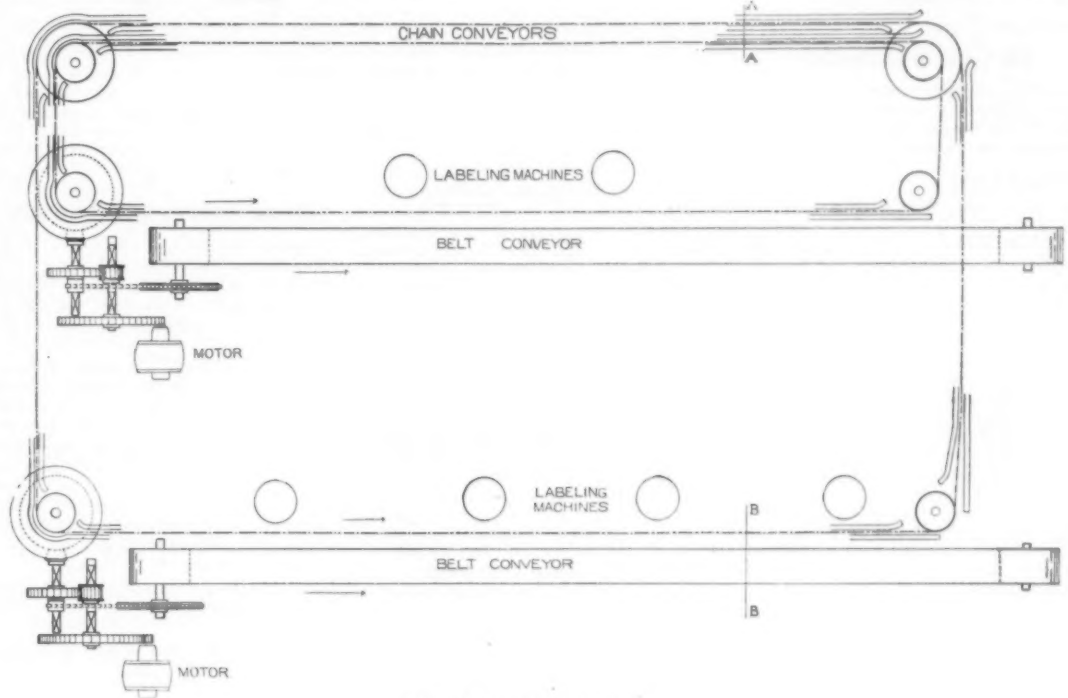
A new bottle-conveying system having a capacity exceeding 20,000,000 bottles a year was recently installed in the brewery of S. Liebmann's Sons, Brooklyn, N. Y., by the Philadelphia works of the Link-Belt Company. Note accompanying illustrations of the installation.

The general view shows the bottles en route from the filling and capping machines to the labeling machines. The equipment comprises two horizontal chain conveyors made up of single-strand Ewart link-belt, and supplemented by two belt conveyors. The chain conveyors run on angle-iron tracks supported at intervals by the cast-iron frames shown in detail cross-section view. These frames are made in two styles—one a combination chain and belt conveyor support, and the other to accommodate the side-by-side runs of both

different size, that followed by the larger or "outer" conveyor, approximating 45 feet in length by 11 feet in width, the di-

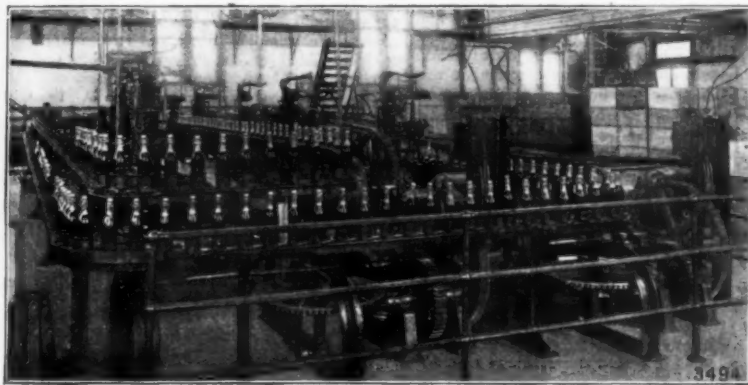
dling bottles, jars or cans in quantities, as in the processes of canning, pickling, preserving, etc.

place 1000 square yards of concrete base six inches thick in less than eight hours with 17 laborers, reducing the labor cost



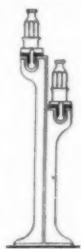
BOTTLE-CONVEYING SYSTEM.

mensions for the smaller (inner) conveyor being about 42 feet by 6 feet. The belt conveyors, before mentioned, parallel the labeling run of each chain conveyor.

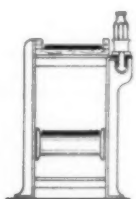


BOTTLE-CONVEYING SYSTEM.

chain conveyors. The bottle-holders, of cast iron and rigidly attached to the chain, are designed to permit quick, easy loading, and by a sufficiently snug fit to assure safety in transportation.



SECTION-A-A



SECTION-B-B
BOTTLE-CONVEYING SYSTEM.

The operation of the system is set forth in the diagram illustration. The chain conveyors traverse rectangular paths of

As the bottles are filled and capped they are transferred manually to the chain conveyors for delivery to the labeling machines, four of which are served by the "outer" conveyor and two by the "inner" one. As they pass in front of the labeling operators attending the outer conveyor the first man picks up every fourth bottle, the operators at the succeeding machines

each removing one of the remaining three. Bottles are taken alternately from the inner conveyor. The labeled bottles are placed upon the contiguous belt conveyor and delivered to the casing department. The conveyors are driven by motors from the General Electric Co. of Schenectady, N. Y.

While this equipment was devised from plans by Adolph Liebmann particularly for the use of his firm, its broad general utility is apparent for establishments han-

Concrete Base for Pavements.

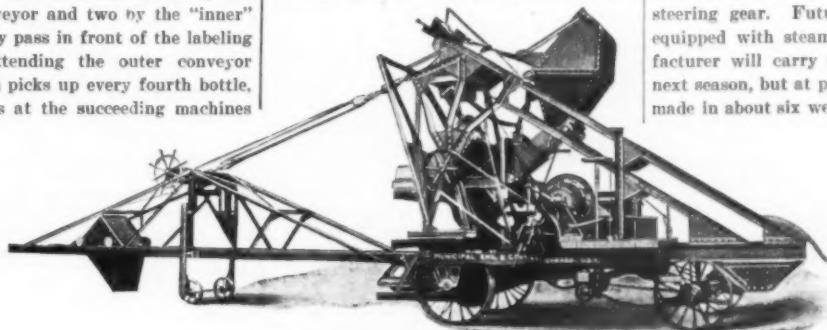
Most paving contractors have at one time or another experimented with some kind of a concrete mixer, and while a great saving in labor can be realized with mechanical mixers on every other kind of work, the laying of concrete base for street pavements involves conditions that have not until very recently been overcome. In other words, the work of setting up and taking down a mixer, building platforms, runways, etc., for each block of work, conveying the mixed concrete from the mixer to the work in wheelbarrows or carts, for which runways are usually necessary, bring the cost so high that the small saving in labor over hand work in many instances would not justify the purchase of a machine, a better quality of concrete being practically the only inducement.

The manufacturer of the Chicago improved cube concrete mixer, the Municipal Engineering & Contracting Co., Railway Exchange, Chicago, recognizing that some special machine for reducing the cost of handling materials on this kind of work must be devised, and looking at the matter

to about one-half that of hand work.

The machine consists of a standard Chicago cube mixer mounted on an extra heavy truck frame, discharging from the rear into a specially-designed bucket, which receives the whole batch and travels rearward on a truck which is 25 feet long and pivoted to swing either way 80 to 85 degrees, permitting the placing of the concrete just where wanted on a street 50 feet wide. There is also a device for quickly and economically elevating the material and charging the mixer, which consists of an elevating hopper traveling on an inclined track and dropping down to the ground in front of the machine, where the entire batch of ingredients can be dumped in from wheelbarrows or materials can be shoveled in directly from the piles which have been previously distributed along the street. There is an automatic water-measuring supply tank mounted in upper part of frame, which insures a uniform supply of water at all times.

The machine has a substantial traction or self-propelling device with both go-ahead and back-up motion and complete steering gear. Future machines will be equipped with steam power. The manufacturer will carry the machine in stock next season, but at present delivery can be made in about six weeks.



MACHINE FOR CONCRETE PAVING.

from the contractors' standpoint, has been experimenting with that end in view. An accompanying illustration shows a machine introduced by the company some months ago, which has been in operation during the past season by one of the largest street-paving concerns in the East, with results so satisfactory that the manufacturer has decided to place the machine on the market next season along with the regular Chicago improved cube mixer. The company says the machine recently mixed and put in

The first annual report of the operations of the municipal repair plant of New Orleans, La., has been published in pamphlet form. This department was organized for the purpose of keeping in repair all of the streets of the city, and the results as shown by the report have been satisfactory and successful. The plant, which is under the direct charge of City Engineer W. J. Hardee, has been equipped with every modern facility for laying as well as repairing any kind of pavement.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Castle Haynes (not a postoffice), N. C.—New Hanover and Pender counties will construct steel bridge over North East river. Contract will be awarded January 7; D. McEachern, chairman, Wilmington, N. C. (See "Machinery Wanted.")

Gadsden, Ala.—Knoxville & Nashville Railroad, W. H. Courtenay, chief engineer, Railroad W. H. Courtenay, chief engineer, Louisville, Ky., is reported to build new bridge over the Coosa river.

Hampton, Va.—Elizabeth City county has voted \$20,000 of bonds for repairing Hampton bridge; David Johnson, County Treasurer.

Shepherdstown, W. Va.—David W. Flick-wir, contractor, has begun work on proposed bridge to be built by the Norfolk & Western Railway across the Potomac river from Washington county, Maryland, to Jefferson county, West Virginia. Six concrete piers will be erected and cofferdams will be constructed in river to permit building of piers from bedrock to above water level. Stone for concrete work will be obtained from quarries at Shepherdstown, which will be reopened, and concrete will be carried from West Virginia shore to piers on a wire cable; Charles L. Stevens, superintendent. (Previously mentioned.)

Macon, Ga.—Atlantic Compress Co., Atlanta, Ga., will build 24-foot underpass requiring two steel girders 24 feet long; manager, W. W. Robinson. (Recently mentioned.)

Vicksburg, Miss.—Board of Supervisors of Warren county has rejected all bids for erection of Ivanhoe bridge and will advertise for new bids in April.

CLAYWORKING PLANTS

Cheltenham, Mo.—St. Louis Terra Cotta Co., St. Louis, Mo., has purchased six acres of land at Cheltenham to erect new plant for manufacturing terra-cotta products; plans for building being prepared; about \$150,000 will be invested.

Crush, Texas.—Crush Brick & Tile Co. incorporated with \$15,000 capital stock; Phil

H. Foscoe, president; Howard Templeton, vice-president, and W. B. Weaver, secretary and manager.

Gabbettville, Ga.—G. T. Traylor contemplates establishment of brick plant. (See "Machinery Wanted" column.)

Parkersburg, W. Va.—Ohio Valley Concrete & Building Co. incorporated with \$25,000 capital stock to manufacture all kinds of building blocks, sewerage and other tile, and all products of sand and cement by H. V. Reese, C. T. Parks, F. A. Parrish and others.

Newnan, Ga.—Jones & Sons Brick Co., R. F. D. No. 5, recently noted to erect brick plant, will utilize Chattahoochee river clay deposits to manufacture brick and perhaps roof tiling; daily capacity, 40,000 to 50,000; machinery purchased; general manager, J. P. Jones.

COAL MINES AND COKE OVENS

Baton Rouge, La.—Baton Rouge Coal & Towing Co. incorporated with \$50,000 capital stock by W. G. Coyle, Charles G. Coyle, R. W. Wilmot, Edwin T. Merrick, Charles Espy and P. M. Schneidau; subsidiary corporation of Monongahela River Consolidated Coal & Coke Co. to handle Baton Rouge business.

Dorothy, W. Va.—The Big Coal Co. has begun shipping from its initial mine preparatory to thorough development of 67,000 acres of Raleigh county land estimated to contain about 72,000 tons of coal to the acre. Its first mine will have an annual output of 500,000 tons of coal, and later additional openings, probably on the Chesapeake & Ohio and Virginian Railways, will be developed to a combined total annual output of from 5,000,000 to 8,000,000 tons of coal. There has been established a mining town with miners' cottages, water supply and other conveniences, and the first mine is fully equipped with modern machinery. The tipple alone cost about \$100,000. Contract has been awarded for mechanical equipment to facilitate mining in other entries which have been driven. It is understood that coke ovens will be constructed. Transportation is furnished by 15-mile branch railway of the Chesapeake & Ohio Railway. The Big Coal Co.'s officers are John H. Jones of Pittsburg, Pa., president; D. G. Jones, also of Pittsburg, vice-president, and S. C. Rowland (vice-president of the International Trust Co., 23 East Baltimore street, Baltimore, Md.), secretary-treasurer. They and Messrs. J. Roman Way of Williamsport, Pa.; J. U. Crawford of Philadelphia, Pa., and H. P. Jones of Pittsburg are the directors. The Messrs. Jones are of the Pittsburg-Buffalo Company, Frick Building, Pittsburg, which will market the output of the Big Coal Co.

Grafton, W. Va.—McGraw Coal Co. organized; president, John T. McGraw; vice-president and general manager, John F. Brophy, Frostburg, Md.; secretary and treasurer, John Keating, Cumberland, Md.

Pemberton, W. Va.—Pemberton Coal & Coke Co. incorporated with \$50,000 capital stock by Harry W. Althouse and S. D. Ky-nor, both of Pottsville, Pa.; M. K. Watkins and W. A. Phillips, both of Mt. Carmel, Pa., and G. S. Linderman, South Bethlehem, Pa. Company will develop 2500 acres of coal land containing two Pocahontas seams, located on extension of Chesapeake & Ohio Railway up Piney river to Winding Gulf. Harry W. Althouse of Pottsville, Pa., is engineer in charge and can be addressed for information.

Pickens, W. Va.—Reported that Amos Bright, Sutton, W. Va.; J. H. Brewster, Weston, W. Va., and others will organize company to develop coal lands.

Pineville, Ky.—Reported that Whitfield Bros. of Alabama have purchased 500 acres of coal land in Bell county at \$65,000 from the Left Fork Coal Co.

Selma, Ala.—W. L. Weaver has found coal veins on stock plantation; will not at present develop same; may have mines developed by others. (Recently mentioned.)

West Virginia.—Joseph E. Thropp, Everett, Pa., is reported as having purchased for development about 2800 acres of coal lands in West Virginia.

CONCRETE AND CEMENT PLANTS

Homestead, O. T.—Cement Products—Cement Products Manufacturing Co. incorporated; will engage in manufacture of wall plaster, plaster board, finishes, etc.; will erect 50x350-foot building at cost of \$50,000; cost of machinery and power, \$20,000; capac-

ity of plant, 150 tons; H. E. Wilson, general manager.

Palestine, Texas.—W. J. Fortune, Indianapolis, Ind.; William Green, P. A. Bowsher and William Irwin, all of Terre Haute, Ind., will establish cement-block factory in Palestine. (Recently mentioned.)

COTTON COMPRESSES AND GINS

Elberton, Ga.—L. H. Turner and Irene and Addie Brewer will erect cotton gin. (See item under "Miscellaneous Manufacturing.")

Henning, Tenn.—T. F. Scott will rebuild cotton gin recently reported burned at a loss of \$6000.

Knoxville, Ala.—W. C. Chiles Company will rebuild cotton gin recently burned; building 52x22 feet will be erected and 3-70 outfit installed; cost of building, \$1000; cost of machinery, \$1750; daily capacity, 30 to 35 bales; engineer and architect, Mr. Sharley; manager, V. C. Miller.

Reynolds, Ga.—J. W. Harp will rebuild gin recently reported burned; building to be 40x60 feet; cost \$2500; capacity 14 bales. (See "Machinery Wanted.")

Sumter, Ala.—Sumter Gin Co. incorporated with \$13,000 capital stock.

ELECTRIC-LIGHT AND POWER PLANTS

Albany, Ga.—Albany Power & Manufacturing Co. will have plans and specifications prepared by J. E. Shirrine, Greenville, S. C., for the development of about 10,000 horsepower at Porter Shoals, on Flint river, where it is planned to build dam and power-house, to be equipped with electrical machinery for generating and transmitting electricity. Company's present plant develops about 3000 horsepower and is supplying power and light to Albany and various enterprises. (Company was recently reported as about to invite proposals for construction of this plant, and was previously mentioned as organized by Alex. W. Smith and others.)

Belair, Md.—Belair Electric Co. will make improvements to plant and expects to furnish current both during day and night, for which purpose plant of Hollingsworth Wheel Co. on Winters run, as well as plant now in operation, will be utilized. It is reported that plans are being considered for consolidating this company with the Electrical Development Co., previously reported incorporated by Alexander S. Bell and others, to build electric plant on Winters run. William H. Harlan has been elected president and J. Alexis Shriver secretary, treasurer and general manager.

Birmingham, Ala.—Greater Birmingham Electric Light & Power Co. organized with \$196,000 capital stock to furnish electric light and power. First building to be erected on site 644 feet long, recently purchased in North Birmingham, will be power-house 100 feet long, equipped with steam turbines and other improved machinery. Plant at the beginning will be 800 kilowatts and of sufficient capacity to supply 1600 16-candle-power incandescent lamps as well as power and arc lights. All wiring will be under ground. Franchises will be asked of various municipalities in the Birmingham district; J. M. Bradley, president.

Chattanooga, Tenn.—Chattanooga Electric Co. will increase capacity of plant and is having estimates prepared for 1500-kilowatt turbine generator. Power plant will then have capacity of 5500-kilowatts, represented by one 1500, two 1000 and four 500-kilowatt machines.

Chickasha, I. T.—Chickasha Water Power Co., which will build electric-light and power plant and transmit electricity to Chickasha, will develop 750 horsepower with water-wheels, current to be started from plant at 6600 volts, 60-cycle, three-phase, and then step down to proper voltages for light and power. Work has begun on construction of solid concrete dam 100 feet long and 20 feet high on the Washita river. Building will be of concrete and brick, 30x40 feet. Company is doing its own construction work under the supervision of C. E. Ross, engineer. Dennis O'Brien is president, Lawrence Martin vice-president and C. E. Ross secretary. (Recently mentioned.)

Jacksonville, Fla.—Board of Bond Trustees will soon award contract for about \$80,000 worth of machinery to be installed in city electric-light plant. Bids were opened October 4, and equipment includes one 1500-kilowatt steam turbo generator and one

50-kilowatt motor-driven exciter. Turbine to be run condensing; steam pressure at boiler 150 pounds; no superheat; 27 inches of vacuum; generator of revolving-field type, three-phase, 60-cycle, 2300 volts.

Lagrange, Ga.—City will probably increase capacity of electric-light and power plant by installation of additional boiler and engines, expending about \$20,000. Address The Mayor.

Lecompte, La.—City is advertising for plans and specifications and for bids for installing electric-light plant to cost about \$10,000. Address The Mayor.

Monroe, Ga.—City's contemplated vote on issuance of \$30,000 of bonds (recently mentioned) is for sewers; not sewers and electric lights, as reported.

New Iberia, La.—Huston Engineering Co., 613 Macheca Building, New Orleans, La., expects to begin work about January 15 on its contract, recently received, for engineering and construction for the Bayou Teche Railway & Light Co. This contract involves erection of power-house in New Iberia, the necessary substations also and construction of 17 miles of track between New Iberia and Jeanerette; estimated cost, \$400,000; work to be completed within 18 months.

Pine Bluff, Ark.—Edwin Cook is engineer in charge of constructing dam over Mindos creek. Contract will be awarded in the spring.

Shattuck, O. T.—Shattuck Electric Light Co. has increased capital stock from \$3000 to \$15,000.

Shepherdstown, W. Va.—John A. Livers, Lancaster, Pa., and M. P. Thorn, Martinsburg, W. Va., recently mentioned as having purchased municipal electric-light plant at Shepherdstown, will organize stock company. City has granted 30-year franchise. Mr. Livers is now operating the system in its present condition with Mr. Carter, engineer in charge. Within about two months it is expected to obtain current from the Martinsburg Light & Power Co.'s plant, now about completed, at Martinsburg, W. Va., and ultimately to secure power from plant now being built at Dam No. 4. Lines in Shepherdstown will be reconstructed.

Smithfield, N. C.—Committee on electric-light plant, sewer and water-works construction has selected Holmboe Company, Lincoln Savings Bank Building, Louisville, Ky., to prepare plans and specifications. Election will be held later to vote on bond issue for the work. (Recently mentioned.)

Sparks, Ga.—City has voted \$20,000 of bonds for construction of electric-light plant and water-works. Address The Mayor. (Recently mentioned.)

Sulphur Springs, Ark.—Smith & Powers are preparing plans for combined electric-light plant and water-works to cost about \$25,000.

Thomasville, N. C.—Thomasville Light & Power Co. incorporated with \$25,000 capital stock to manufacture and distribute electricity for light, heat and power by B. F. W. Bryant, Boston, Mass.; J. T. Cramer, A. H. Ragan, J. W. Peacock and others. Mr. Bryant is engineer in charge. (Company was recently mentioned to erect electric-light and power plant with capacity of 150 kilowatts; cost of buildings and equipment, \$20,000.)

FOUNDRY AND MACHINE PLANTS

Beaumont, Texas.—Lee Carroll, proprietor of Beaumont Marine Iron Works, has purchased controlling interest in Keith Electric Co. and will consolidate the two companies. It is planned to enlarge the electrical and automobile departments and install additional facilities. Company will erect garage and establish repair shop, automobile supply and salesroom.

Chattanooga, Tenn.—John A. Betzeman, Macon, Ga., is reported to consider the establishment of plant in Chattanooga for manufacturing a new patent steel-frame gin, with a capacity of about 10,000 machines annually.

Guthrie, O. T.—Friesland Steam Separator Co. incorporated with \$25,000 capital stock by Carl Glitsch of Oklahoma City, Charles M. Friesland and P. P. Shaw, both of St. Louis, Mo.

Humboldt, Tenn.—H. Baungartner and H. A. Watson, both of Trenton, Tenn., and H. A. Watson, Jackson, Tenn., have purchased the Humboldt Machine Works; will increase capacity of the shops and manufacture gasoline engines and boilers in addition to regular machine work.

Knoxville, Tenn.—Knoxville Implement & Machinery Co., recently reported incorporated with \$25,000 capital stock by L. H. Adams, P. A. Sublett and J. R. Van Cleave.

Marshall, Texas.—Marshall Car Wheel & Foundry Co. will rebuild plant recently burned at a loss of \$100,000.

Middleburg, Va.—Economy Separable Switch Point Co. incorporated with \$150,000 capital stock; W. M. Mitchell, Louisville, Ky., president; W. M. Mitchell, Jr., St. Louis, Mo., secretary, and C. W. S. Turner of Middleburg, attorney.

Oklahoma City, O. T.—Oklahoma City Implement & Manufacturing Co. incorporated with \$25,000 capital stock by L. H. Adams, P. A. Sublett and J. R. Van Cleave.

Oklahoma City, O. T.—Automatic Hydraulic Engine Co. incorporated with \$100,000 capital stock by W. P. Steele, E. L. McCain, J. P. Weatherby, L. S. Dodson and others.

Richmond, Va.—J. G. Dombrower Corporation, 17 Governor street, will later engage in manufacture of soil pipe, fittings, etc. (See item under "Miscellaneous Enterprises.")

Staunton, Va.—Leader Plow Co. has completed plant mentioned in August; capacity, 200 garden plows per day; W. A. Payne, general manager.

Waycross, Ga.—South Atlantic Car & Manufacturing Co. will rebuild plant recently reported burned at a loss of \$250,000. Capital stock will be increased from \$250,000 to \$350,000, and \$300,000 of bonds will be issued. (Lately mentioned.)

ICE AND COLD-STORAGE PLANTS

Memphis, Tenn.—Selden-Breck Construction Co., St. Louis, Mo., is contractor to erect building for Memphis Cold-Storage Co. to be equipped as cold-storage and warehouse plant; six stories, with basement and sub-basement; brick and concrete; cost \$114,000, exclusive of piping, insulation, etc. (Memphis Cold-Storage Warehouse Co. was recently mentioned as having increased capital stock from \$300,000 to \$500,000.)

New Orleans, La.—Louisiana Ice Co. incorporated with \$100,000 capital stock; Charles A. Zilker, president; L. G. Petit, vice-president, and W. H. McGraw, secretary-treasurer.

Rockwood, Tenn.—Rockwood Ice & Coal Co., recently reported incorporated with \$10,000 capital stock, will establish 10-ton ice plant and has awarded contract for building to J. G. Zernstein. Machinery has been purchased. J. N. Baker is president, Robert H. Thompson vice-president, W. D. Kelley secretary-treasurer and S. P. Swanson manager.

Walter, O. T.—Pure Ice Co. incorporated with \$20,000 capital stock by R. H. and M. E. Sherman, J. S. and M. L. Russ.

IRON AND STEEL PLANTS

Jenifer, Ala.—Jenifer Iron & Coal Co. is understood to be completing arrangements for blowing in its iron furnace with an annual output of 50,000 tons, and its coke ovens with an annual output of 50,000 tons, in accordance with report last month as to \$400,000 being available for this purpose; also to develop iron mines. W. H. Weller of Anniston, Ala., is president.

LUMBER-MANUFACTURING PLANTS

Alexandria, Va.—Blue Ridge Lumber Corporation, recently reported incorporated, will manufacture yellow poplar, basswood, black-oak, ash, maple, chestnut, white birch, white oak, chestnut oak and black oak lumber; business office, Culpeper, Va.; president, Louis C. Barley; vice-president, W. C. Walte; secretary-treasurer, Raleigh T. Green.

Ayden, N. C.—Ayden Lumber Co. has purchased the gum timber rights on tract of land estimated to contain 1,000,000 feet of lumber; purchase price, \$6250.

Calro, Ga.—J. T. Ham contemplates rebuilding turpentine still recently burned at a loss of \$3000.

Cherry Valley, Ark.—McKee & Ferguson, Kansas City, Mo., have purchased about 537 acres of timber land in Arkansas and will begin development work in about 30 days; later it is probable that a 50-horse-power sawmill will be installed. Address at present, Cherry Valley. (See "Machinery Wanted.")

Clarendon, Ark.—Wisark Lumber Co., L. C. Whitte, secretary, Edgerton, Wis., has purchased 11,253 acres of timber land in Monroe and Prairie counties; will not develop at present.

Crossville, Tenn.—Joseph Deters & Son have purchased 900 acres of timber land.

Durant, Miss.—Durant Lumber Co. incorporated with \$5000 capital stock and J. W. Jordan, president; will establish lumber plant with daily capacity of 12,000 feet oak and gum lumber; will erect frame building. (A. J. Thornton and P. B. Miller, both of Morganfield, Ky., were mentioned recently to establish sawmill, shingle mill, lumber yard, etc., and the Durant Lumber Co. was stated to have purchased 1000 acres of timber land in Holmes county and as having purchase of additional 1000 acres under consideration.)

Elizabeth City, N. C.—R. E. Johnston, Johnston Land Investment Co., Washington, D. C., has sold 180,000 acres of timber land at \$3,000,000 in Eastern North Carolina. Purchasers will erect sawmill at Elizabeth City with capacity of 200,000 feet in 10 hours. Mill will be operated by electricity.

Franklin County, Tenn.—Joel Hardin, Hillsboro, Ohio, has purchased at \$9000 1280 acres of timber land in Franklin county.

Hartley, Ky.—Hartley Lumber & Manufacturing Co. incorporated with \$30,000 capital stock by Wesley Griffen, Sol Tackett and Henry Tackett to manufacture lumber.

Houston, Texas.—Houston-Liggett Lumber Co., recently noted incorporated with \$60,000 capital stock, will operate sawmill and box-manufacturing plant already established; president and general manager, W. G. Liggett; vice-president, J. S. Rice; secretary and treasurer, H. G. Green.

Isom, Ky.—Southern Lumber Co., through John Combs, has purchased 4000 acres of timber land and proposes to establish sawmills for development.

Lake Charles, La.—Louis A. Lehman, Vicksburg, Miss., has purchased 1968 acres of timber land in Calcasieu parish, Louisiana.

Lake Charles, La.—Gladys Lumber Co. incorporated with \$25,000 capital stock by Francois Chavanne, Frank B. Field, Sheridan Williams and E. E. Faris to build and operate sawmills, construct tramroads, etc. Company has purchased sawmill of Perkins & Williams near DeQuincy, La., where it will begin operations. Mr. Faris will be active manager.

Lake Charles, La.—Lyons Lumber Co. incorporated with \$50,000 capital stock; D. C. Powell, president; J. L. Lyons, Jr., vice-president, and M. P. Erwin, secretary-treasurer.

Leslie County, Ky.—Swann-Day Lumber Co., Clay City, Ky., represented by Green Walters, will develop 5000 acres of timber land in Leslie county and additional acreage in several different counties in Eastern Kentucky.

Mangum, O. T.—Oklahoma Home Lumber Co. incorporated with \$50,000 capital stock by J. Leadbetter, G. H. Abernathy, J. D. Carreathers and others.

Nashville, Tenn.—Union Lumber Manufacturing Co. incorporated with \$30,000 capital stock. W. J. Gambrell is president and general manager and George R. Christie assistant general manager, secretary and treasurer.

North Carolina.—Baltimore and Philadelphia capitalists are about closing negotiations for 150,000 acres of timber land in North Carolina, intending to organize a \$1,000,000 company to develop the property by logging and building mills. Carrington & Carrington, 110 East Lexington street, Baltimore, Md., represent the purchasers.

Oklahoma City, O. T.—Pine Belt Lumber Co. has increased capital stock from \$150,000 to \$225,000.

Port Barre, La.—R. Lee Riggs of Riggs Cypress Co., Patterson, La., and associates will erect single-band mill during early spring of 1908; capacity about 50,000 feet per day. H. J. Williams, Patterson, La., will have charge of construction. (Mentioned recently under Melville, La.)

Rockingham, N. C.—Rockingham Lumber Co. incorporated with \$10,000 capital stock by George S. Steele, A. D. Dumas, William Little Steele and others.

Rowan County, Ky.—Central City Woodworking Co., Central City, Ky., will develop 5000 acres of timber land in Rowan and Carter counties and will build two or three branch lumber roads.

Walnut Lake, Ark.—Walnut Lake Cypress Co. is building plant to manufacture cypress lumber, not walnut, as lately noted; mill designed by Clark Bros. Company of Belmont, N. Y., which also furnishes the machinery; mill has concrete foundations; frame of heavy cypress timber; band mill

to carry 12-inch saws; steam feed; nigger with cylinders 8 and 10 inches by 72 inches; 52 to 55-inch three-block carriage; edger; automatic trimmer; lath mill; filing-room; 18x24-inch two-valve automatic engine, with flywheel 108x26 inches, to run 100 revolutions; two horizontal return tubular boilers, 72-inch by 18-foot, to carry working pressure 125 pounds to square inch; daily capacity 60,000 feet. Timber, located eight miles from mill, is hauled on gasoline boats via Walnut lake and four-mile canal, now being constructed; president, E. P. Ladd; vice-president, C. S. Bacon; secretary-treasurer, W. B. Craft; mill superintendent, R. E. Schulze.

Washington County, Va.—Grand River Lumber Co., Pittsburg, Pa., is reported to have purchased for development 35,000 acres of timber land in Moccasin Gap, Washington county, at \$350,000.

MINING

Chillicothe, Mo.—Chillicothe Marble & Granite Co. incorporated with \$5000 capital stock by Frank P. Reynolds, Jeff D. Brookshier, Karl Blanchard and others.

Guthrie, O. T.—Toga Copper Co. incorporated with \$100,000 capital stock by E. V. Remington, Oklahoma City; Ernest H. Green and C. C. Ferry, both of Wellboro, Pa.

Harrison, Ark.—Marble City Zinc & Marble Co. incorporated with \$24,000 capital stock; W. H. Ceall, president; W. W. Moore, vice-president, and A. J. Lopp, secretary-treasurer.

Jenifer, Ala.—Jenifer Iron & Coal Co. is understood to be planning the further development of its iron mines. W. H. Weller of Anniston, Ala., is president. (See "Iron and Steel Plants.")

Joplin, Mo.—Reported that Michigan capitalists, represented by W. S. Dewing, have purchased 200 acres of mining land near Joplin and will undertake development.

Kirksville, Mo.—State Lead, Zinc & Development Co. incorporated with \$2,000 capital stock by J. M. Hopewell, Wilmont Reed, J. L. Reed and others.

Lewisburg, W. Va.—Greenbrier & James River Stone Co. incorporated with \$50,000 capital stock by Harry Frazier, R. S. Holt, C. G. Mathews and others to operate rock quarries, crush stone, etc.

Liberty Copper Mines (P. O. at Union Bridge), Md.—Virginia Consolidated Copper Co., now operating the Old Liberty Copper Mines in Frederick county, has received additional machinery, which will enable it to conduct operations on an enlarged scale. Principal address is care of H. J. Lohman, chairman of executive committee, McKeesport, Pa. George William Brown at Union Bridge, Md., is general manager. (Company was previously mentioned as having erected and equipped buildings at a cost of \$25,000, product to be boronite concentrates, six tons extracted per day from 130 tons of low-grade ore.)

Little Rock, Ark.—Arkansas Fuller's Earth Co. incorporated with \$25,000 capital stock to mine fuller's earth by F. W. Duttlinger (president), C. F. Lenz, W. D. Kennedy and others.

Mayville (not a P. O.), Texas.—John May, Bridgeport, Texas, who has contract to furnish Fort Worth & Denver City Railway with 250,000 cubic yards of ballast, will develop rock quarries at Mayville and is installing crushing plant with daily capacity of 1000 to 1500 yards of ballast, equipped with steam drills, two crushers, both of which will probably be on concrete foundations, etc. Several buildings are being erected at a cost of about \$4000, including dining hall 104x18 feet; four bunkhouses, each 80x18 feet, with sleeping arrangements for 42 men each; office building, 60x18 feet; corral barn with accommodations for 60 mules, feed, etc. Water-works with one mile of piping costing \$2000 will also be constructed. About 200 men will be employed. Fort Worth & Denver City Railway is building nine-mile standard-gauge branch road from Alvord, Texas, to the quarries.

Mt. Pleasant, Tenn.—Great Southern Phosphate Co. incorporated with \$10,000 capital stock by W. E. Sandy, E. T. Ligon, E. Dan Smith and others.

St. Clair, Mo.—Copper Chief Mining Co. incorporated with \$24,000 capital stock by M. M. Beeman, William H. Gaskill, Harris S. Moyer and others.

Washington, Va.—Company of which Joseph H. Logan, Cincinnati, Ohio, is president is developing the Mount Marshall copper mine about five miles from Washington, on which an option has been secured from John J. Miller. Oliver Conner is engineer in charge of operations.

Wilkes County, N. C.—Wolf Rock Granite

Co., G. W. Hinshaw, Winston-Salem, N. C., president, has purchased stone mountain in Wilkes county at \$175,000. It is understood that company will develop the property. (Recently mentioned.)

Winston-Salem, N. C.—McGalliard Granite Co. incorporated with \$25,000 capital stock by Lochlan McGalliard, D. Cicero Orrell, C. A. McGalliard and Alex McGalliard to operate quarries, manufacture and deal in all kinds of brick, cement, etc.

Woodford, I. T.—Woodford Asphalt Co. contemplates mining asphalt. (See item under "Miscellaneous Enterprises.")

MISCELLANEOUS CONSTRUCTION WORK

Arkansas—Levee Work.—Ronch & Stansell, Memphis, Tenn., have contract for construction of 115,000 cubic yards of levee work in Arkansas for the Government.

Brownsville, Texas.—Irrigation.—Indiana-Texas Land & Irrigation Co., recently noted to construct canal and to have let contract to Indiana Co-operative Canal Co., will erect one-story steel building for pumping plant; 50x100 feet; cost \$1000; cost of machinery, \$10,000; will irrigate 10,000 acres; about 50,000 gallons water per minute; engineer in charge, T. J. Mahaffey; manager, E. F. Rowson & Co. (See "Machinery Wanted" column.)

Cleburne, Texas.—Heating Plant.—Sanguinet & Staats, Fort Worth, Texas, are architects and engineers in charge of plans for installation of heating plant for school buildings mentioned recently; chairman of board, John L. Cleveland.

Fort St. Philip, La.—Sea Wall.—United States Steel Piling Co., 135 Adams street, Chicago, Ill., has contract to furnish piling to be used in proposed steel seawall to be built at Fort St. Philip, full details of which were mentioned in September. Richard M. Murphy, New Orleans, La., has contract for its construction at \$36,500; Col. E. H. Ruffner, U. S. engineer at New Orleans, La.

Greenville, Miss.—Drainage Canal.—Board of Supervisors of Washington county has appropriated \$3500 toward building drainage ditch from city to Bethesda bayou, which will be used to drain the city. City Council has appropriated like amount.

Hannibal, Mo.—Levee.—Chicago, Burlington & Quincy Railway, W. L. Breckinridge, engineer, Chicago, Ill., is reported to construct levee at a cost of \$300,000, provided with double trackage.

Lawton, O. T.—Engineering and Construction.—Kerly, Mayfield & Shaw Engineering & Construction Co. is name of company recently noted incorporated with \$30,000 capital stock by E. R. Kirby and others. Mr. Kirby is engineer in charge.

Newbern, N. C.—Heating Plant.—Craven County Commissioners will invite proposals for installation of plant for heating courthouse in connection with jail; M. R. Foy, chairman.

Opeolousa, La.—Irrigation System.—Colonial Land Co. incorporated with \$300,000 capital stock to further rice irrigation and canal projects undertaken in St. Landry parish by J. Franklin Schell, general manager of the Union Irrigation Co. This work, referred to at length in September, calls for initial canal installation to irrigate 30,000 acres; discharge basin or beginning of main canal 75 feet above Gulf level, making it possible to irrigate eventually 1,500,000 acres without relief installation; initial plant to have one lift. Machinery contracted for includes pump to lift 75,000 gallons per minute, with maximum capacity of 100,000 gallons; two 1000-horse-power engines, with surface condensers; four water-tube boilers, etc. Officers of Colonial Land Co. are: Henry Drachbar, Lancaster, Pa., president; Raoul LeBourgeois of Opeolousa, vice-president; D. J. Eckman, treasurer, and J. H. Albert, secretary, both of Lancaster, Pa.

Pine Bluff, Ark.—Heating and Ventilating Plant.—School district contract for heating and ventilating plant, recently noted to be awarded November 23, calls for hot-air heating, fan system; estimated cost, about \$9000; school in which plant will be installed is \$90,000 building; Fred Wilson, superintendent construction; plans and specifications to be seen at office of Wilson & Hendrix, or at office of S. M. Taylor, president of board.

Salisbury, N. C.—Heating Plant.—Contract for heating plant for People's Bank & Trust Co. building has been awarded to B. MacKenzie, Greensboro, N. C.; plans by Frank P. Milburn & Co., Home Life Building, Washington, D. C.

Wharton, Texas.—Irrigation.—Wharton Irrigation Co. has selected the Weber-Duller Construction Co., Houston, Texas, as de-

signing engineer for irrigation plant to be built on the Colorado river near Wharton, which will eventually irrigate about 25,000 acres. Equipment, etc., will be furnished and installed by the Allis-Chalmers Company, Milwaukee, Wis.

Wheeling, W. Va.—Steel Construction.—Moys Construction Co. incorporated with \$5000 capital stock to construct steel buildings, bridges, tanks, viaducts, iron and steel roofing, etc., by J. E. Young, J. W. O'Neal, J. H. Slaughter and others.

MISCELLANEOUS ENTERPRISES

Argyle, Ga.—Oil Wells.—South Georgia Oil & Gas Co., recently reported incorporated with \$100,000 capital stock, will drill for oil near Argyle and has elected S. S. Ludlum, Waycross, Ga., president; J. R. Booth of Argyle, vice-president, and Warren Lott, Waycross, Ga., secretary-treasurer.

Baltimore, Md.—Amusement Park.—Electric Park Co., Holmes Jones, manager, 4 Light street, recently reported as having purchased Electric Park, a suburban amusement resort, will expend from \$400,000 to \$600,000 in improving it and providing new amusement features. About 30 buildings will be erected, these being of steel, wood and staff construction and containing numerous electric lights. No electric generating plant to be constructed.*

Bartlesville, I. T.—Townsite.—North Oklahoma Townsite Co. incorporated with \$100,000 capital stock by A. D. Morton of Bartlesville, Ben W. Bird and C. M. McCarter, Pond Creek, O. T.

Bay St. Louis, Miss.—Transportation.—Lower Coast Transportation Co. incorporated with \$8000 capital stock to operate steamships by Paul F. Renaud, Vincent Scurich and James Monroe Salvant, all of New Orleans, La.

Bartow, Fla.—Laundry.—Willis & Day, proprietors of the Bartow Steam Laundry, will erect new building to be equipped as laundry.

Big Sandy, Texas.—Oil Refinery.—Gulf Pipe Line Co., Beaumont, Texas, is reported as contemplating establishment of oil refinery at Big Sandy.

Birmingham, Ala.—Electric Company.—Oliver Electric Co. incorporated with \$6000 capital stock to install and repair all kinds of electrical machinery; S. W. Oliver, president; J. P. Balding, secretary-treasurer.

Blackburn, O. T.—Telephone System.—Daisy Telephone Co., recently reported incorporated with \$5000 capital stock, has elected Frank Huston president and William M. Ware secretary. Mr. Ware is also engineer in charge.

Clarendon County, S. C.—Southern Plant & Producing Co. incorporated with \$250,000 capital stock by Thomas S. and John R. Sumter and H. T. Abbott, probably all of Sumter, S. C.

Duke, O. T.—Telephone System.—Hollowman Coraba Independent Telephone Co. incorporated by W. D. Branson, James D. Moore, Calvin G. Hukill and others.

Edgewood (postoffice at Tennessee City), Tenn.—Printing Plant.—E. W. Dodge will establish printing plant.

Fernandina, Fla.—Phosphate Elevator.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., has not yet approved plans for rebuilding phosphate elevator recently mentioned; approximate cost, \$20,000; capacity, loading 2000 tons per day.

Hinton, W. Va.—Land Improvement.—The Greenbrier Company incorporated with \$100,000 capital stock to own townsites, etc., by William H. Lawyers, James T. McCreery, T. H. Lilly and others.

Hooker, O. T.—Oil, Gas, etc.—Hooker Oil, Gas, Water & Mining Co. incorporated with \$10,000 capital stock by N. O. Stephenson, Edward E. Brown, E. J. Albright and others.

Jackson, Mo.—Laundry.—Jackson Laundry Co. incorporated by Joseph E. Schmuke, J. G. Miller and W. H. Miller.

Jefferson City, Mo.—Oil & Gas Wells.—Keystone Oil & Gas Co. incorporated with \$50,000 capital stock by Leo Welier, Walker W. Goodall, Monroe Belch and others.

Jennings, La.—Oil Wells.—The Noble Company has been organized with C. O. Noble, manager, has secured lease on 10 acres of land and will prospect for oil.

Kansas City, Mo.—Automobile Company.—Maxwell-Briscoe Automobile Co. incorporated by Benjamin Briscoe, J. D. Maxwell, Bert Stimson and others.

Kingwood, W. Va.—Supplies.—Kingwood Supply Co. incorporated with \$15,000 capital stock by E. M. Williams, L. M. Albright, S. T. Steek and others.

Lancaster, Ky.—Telephone and Telegraph System.—Kentucky Telephone & Telegraph

Co. incorporated with \$10,000 capital stock by J. W. Elmore, H. V. Bastin, H. T. Logan and others.

Lancaster, S. C.—Land Improvement.—Cunningham-Bennett Company incorporated with \$15,000 capital stock by W. P. Bennett and T. K. Cunningham.

Lawton, O. T.—Publishing.—The News-Republican Company incorporated with \$30,000 capital stock by Frank V. Wright, Arthur M. Kinne and S. C. Chatham.

Marion, N. C.—Land Improvement.—J. W. Pless has purchased 15 acres of land which he will divide into building lots, streets, etc.

Marlin, Texas.—Publishing.—C. J. Bartlett and E. P. Hutchings will publish the "Tribune of Falls County" and equip a two-story brick building with machinery for newspaper and job work.

Memphis, Tenn.—Dyeing Works.—Kraus & Co., recently reported incorporated with \$25,000 capital stock, will continue and enlarge dyeing and cleaning works; Maurice Kraus, president; Mitchell Rosenthal, vice-president; Abe Scharff, secretary-treasurer, and Ernest M. Kohn, superintendent.

Meridian, Miss.—Garbage Crematory.—Walter G. Kirkpatrick, engineer, Jackson, Miss., is communicating with Board of Aldermen relative to establishing garbage crematory in Meridian to cost about \$4000.

Morrison, O. T.—Oil and Gas Wells.—Black Bear Oil & Gas Co. incorporated with \$100,000 capital stock by G. W. Sanders, B. F. Jones, R. E. Bagby and others.

Mt. Olive, N. C.—Drugs.—Franklin Drug Co. incorporated by O. E., M. T. and T. S. Franklin.

Nashville, Tenn.—Grain Elevator.—Ryman Warehouse & Elevator Co. incorporated with \$5000 capital stock by R. J. Neville, B. L. Neville, T. G. Ryman, I. T. Rhea and W. D. Rhea.

New Orleans, La.—Oyster Company.—Gulf Coast Oyster Co. incorporated with \$5000 capital stock to deal in, plant, pack and store oysters by Charles Kennedy, John McGraw and Edward Pierson.

Norfolk, Va.—Exposition.—Florida Midwinter International Exposition Co. incorporated with \$100,000 capital stock; Oscar Moser, vice-president, and E. W. Wolcott, counsel.

Okeene, O. T.—Gypsum Rock.—Oklahoma Gypsum Co., recently reported incorporated, will ship gypsum rock to mills and Portland-cement companies; H. E. Wilson, manager; principal address, Homestead, O. T.

Oklahoma City, O. T.—Builders' Supplies.—S. J. Hanson Builders' Supply Co. incorporated with \$20,000 capital stock by S. H. Hanson and W. M. Fowler of Oklahoma City and M. G. Smith, Dallas, Texas.

Oklahoma City, O. T.—Oil Wells.—Oklahoma Oil Development Co. incorporated with \$250,000 capital stock by H. Y. Thompson of Oklahoma City; George Shlay, Saginaw, Mich., and others.

Pascagoula, Miss.—Land Cultivation.—Nutbank Pecan Co. has increased capital stock to \$150,000; James F. Booge, president.

Petersburg, Va.—Laundry.—Sanitary Family Laundry, recently reported incorporated, will erect frame building and establish laundry; president, R. H. Mann; manager, Morris Levy. (See "Machinery Wanted.")

Quincy, Fla.—Sharon Tobacco Co., recently reported incorporated with J. G. Sharon president, will engage in the cultivation of tobacco; plant will be erected to irrigate lands; cost of building, \$1500; cost of machinery, \$2500. (See "Machinery Wanted.")

Raceland, La.—Farming.—Jerry Woodward, South Bend, Ind.; Haas Bros., Kalamazoo, Mich., and E. L. Page, Vicksburg, Mich., have purchased 375 acres of reclaimed swamp land in Lafourche parish, which will immediately be cultivated and improved with buildings, etc. It is proposed to organize company later to work the land just purchased, together with other property they will secure, an option having already been obtained on 50,000 acres of swamp land, which has not yet been reclaimed.

Raleigh, N. C.—Repair Shop.—T. F. Brockwell will erect building to be equipped for bicycle, gun, automobile and typewriter repairing.

Richmond, Va.—Plumbing, etc.—J. G. Dombrower Corporation, recently noted incorporated, will engage in plumbing, tinning and gas, steam and hot-water heating, contract work; will later manufacture soil pipe, fittings, etc.; offices at 17 Governor street; J. G. Dombrower, president, treasurer and general manager.

Robert Lee, Texas.—Hardware.—Lane Hardware Co. has increased capital stock from \$5000 to \$10,000.

Salem, W. Va.—Supply Company.—Salem

Supply Co. incorporated with \$5000 capital stock by C. B. Ross, R. S. Startzman, W. A. Carpenter and others.

Savannah, Ga.—Land Improvement.—Mendel Real Estate & Investment Co. incorporated with \$15,000 capital stock by Carl Mendel, Paul A. Jurgeson, John F. Lubs, Fred Wessels, Jr., and others.

St. Louis, Mo.—Valley Gulf Navigation Co. is proposed for organization to establish the large line for freighting between St. Louis and New Orleans. L. C. Irvine is chairman, J. F. O. Reiler treasurer, W. H. Thorwgen, Joseph McCullough, James Donabough and Arthur Miller members of committee. (Mentioned last week.)

St. Louis, Mo.—Land Improvement.—Tesora Realty Co. incorporated with \$300,000 capital stock by Henry Koehler, Jr., Hugo A. Koehler and J. E. Guntly.

St. Louis, Mo.—Contracting.—Millwood Development Co. incorporated with \$5000 capital stock by Edwin E. Goebel, Louis Benjamin and Z. C. Maher.

Washington, D. C.—Land Improvement.—E. I. Bernardez Industrial Co. incorporated with capital stock of \$100,000; A. Oswald, president; R. I. Livingston, secretary and treasurer, The Savoy, 2804 14th street N. W., both of Washington, D. C., and J. L. Pennington, vice-president, Fort Worth, Texas.

Wilmington, N. C.—Laundry.—City Laundry Co. incorporated with \$75,000 capital stock by D. L. Gore, L. B. Rogers, J. H. Hinton and others.

Woodford, I. T.—Oil Wells.—Woodford Asphalt Co. will develop oil wells, and as soon as railroad is completed by the Colorado, Oklahoma & Gulf Railroad it is planned to improve the plant to mine asphalt.

MISCELLANEOUS MANUFACTURING PLANTS

Alabama City, Ala.—Gas Plant.—Tri-City Gas Co., Henry C. Higgins, Dixon, Ill., president, now erecting gas plant in Gadsden at a cost of about \$75,000, has applied for franchise to extend its mains and supply Alabama City with gas. It is also planned to supply Attalla, Ala. (Mentioned in August.)

Alma, Ark.—Cannery.—Ozark Preserving Co. has begun the construction of preserving plant, consisting of group of six buildings; daily capacity, consumption of 200 to 300 bushels. Cider mill will be built in addition with tank having capacity of 200,000 gallons. A 30-inch-gauge railroad will be constructed. (Recently mentioned.)

Amarillo, Texas.—Bakery.—Electric Bakery Co., recently reported incorporated, will operate bakery; machinery cost, \$1500 to \$1800; president, C. L. Green; vice-president, M. R. Dick; secretary and treasurer, W. P. Bradshaw; manager, John Planet.

Baltimore, Md.—Can Factory.—American Can Co., Boston and Hudson streets, has purchased plant of National Canning & Manufacturing Co. on Boston street, and will continue to operate it. The latter company has been applying a preparation to interior of cans to prevent contents coming in contact with the tin.

Baltimore, Md.—Metallic-bed Factory.—Maryland Metallic Bed Co. incorporated with capital stock of \$25,000 to manufacture metallic beds by Philip E. Graff, 320-326 North Holliday street; Franklin L. Graff, 320-326 North Holliday street; Wm. H. Rogers, Wm. N. Bunce and Thomas W. Brundige.

Baltimore, Md.—Glass-bottle Factory.—Emerson Drug Co., drug manufacturer, 308-312 West Lombard street, has commissioned Joseph Evans Sperry, architect, Calvert Building, to prepare plans and specifications for proposed glass-bottle factory.

Beard, W. Va.—Corn Mill, etc.—C. S. Donnelly, proprietor, will make improvements to Beard Mill; will install feed mill and make specialty of water-ground cornmeal and buckwheat flour; capacity, 200 bushels meal and 10 tons feed.

Bradfordville, Fla.—Tobacco Factory.—Bradfordville Tobacco Co. incorporated with \$30,000 capital stock; L. Morton Murray, president, and C. G. Murray, secretary-treasurer.

Brightwater, Ark.—Lime Works.—Brightwater Lime Co., recently noted to have increased capital stock, will operate plant with daily capacity of 160 barrels white lime. J. D. Torbett is president and D. H. Torbett secretary and manager. (See "Machinery Wanted.")

Buckhannon, W. Va.—Window-glass Factory.—Interstate Window Glass Co. incorporated with \$1,000,000 capital stock to manufacture window glass and other articles from glass, etc.; S. A. Moore, C. F. Teter, W. H. Carter, E. H. Cruin, all of Philippi, W. Va., and Ira A. Milnor, Franklin, Pa.

Cement, O. T.—Mattress Factory.—Cement Mattress Factory organized with R. G. Doal president, R. J. Roberts treasurer and B. F. Wallace superintendent.

Charlotte, N. C.—Cannery.—McElroy Fruit Co. incorporated with \$20,000 capital stock by W. E. McElroy, J. M. Harry, William Anderson, J. C. Crowell and others.

Columbus, Ga.—Mill Trucks and Supplies. Columbus Truck & Supply Co. incorporated with \$10,000 capital stock, and privilege of increasing to \$100,000, to manufacture and deal in mill trucks, mill supplies, etc., by W. H. Dismuke, F. M. Morton and H. L. Woodruff.

De Ison, Texas.—Candy Factory.—E. Nevill and associates have established candy factory.

Elberton, Ga.—Flour and Grist Mill.—L. H. Turner and Irene and Addie Brewer will build cotton gin, flour mill and grist mill on Beaverdam creek. It is proposed to raise the dam, which will double capacity now obtained. About \$3000 will be expended.

Fort Smith, Ark.—Cannery.—Reported that a Mr. Chesterfield of Paducah, Ky., contemplates establishing canning factory in Fort Smith.

Fredericksburg, Va.—Pickle Factory.—Alart & McGuire will install new machinery and make improvements to pickle factory; H. B. Lane, manager.

Gadsden, Ala.—Cigar Factory.—Long & Donehoo, Carmi, Ill., will establish cigar factory in Gadsden.

Gallatin, Texas.—Condensed-milk Factory.—Establishment of condensed-milk plant is contemplated. Edward L. Anderson of Board of Trade may be addressed.

Goltry, O. T.—Flour Mill.—John P. Unruh and associates, all of Meno, O. T., have purchased and will operate flour mill with daily capacity of 125 barrels at Goltry. Mr. Unruh will be manager.

Greenville, Fla.—Manufacturing.—Union Manufacturing Co. incorporated with \$10,000 capital stock; S. H. Wade, president, and J. T. Prince, secretary-treasurer.

Greenville, Tenn.—Cannery.—A. J. Patterson contemplates establishment of tomato cannery. (See "Machinery Wanted.")

Hartsville, Tenn.—Tobacco Factory.—R. G. Owen & Son will erect addition 60x80 feet to tobacco factory and install boiler.

Houston, Texas.—Apiary Supplies.—W. S. Oliver, Beeville, Texas, contemplates establishing plant in Houston for manufacturing beehives, frames, etc., used in an apiary.

Huntington, W. Va.—Shoe Factory.—Jeff Newberry will establish shoe factory. Taylor and Robinson are said to be the contractors.

Jacksonville, Fla.—Tobacco Factory.—Holmes-Rogers Leaf Tobacco Co. incorporated with \$50,000 capital stock; W. F. Coachman, president, and W. P. Holmes, Jr., secretary-treasurer.

Kansas City, Mo.—Manufacturing.—Speer Manufacturing Co. incorporated with \$10,000 capital stock by Samuel Speer, A. B. Stote, W. H. Hazel and others.

Kansas City, Mo.—Soap Factory.—Reported that W. A. Graves and B. J. West, Minneapolis, Minn., now registered at the Densmore Hotel, Kansas City, are considering establishment of plant for manufacturing a liquid soap.

Lexington, Tenn.—Cannery.—Chicago Building & Manufacturing Co., Dixie C. Williams, representative, Chicago, Ill., will erect and equip the Lexington Combined Fruit & Vegetable Canning Factory. Main building will be two stories high. Building committee is composed of C. C. Davis, R. A. Lewis, T. A. Lancaster and others.

Martin, Tenn.—Cannery.—Paducah Canning Co., Paducah, Ky., is reported as to establish cannery in Martin.

Mena, Ark.—Cannery.—Company recently noted to be organizing for establishment of cannery contemplates erection of building at cost of \$2500; cost of machinery to be purchased and installed, \$3000; officers not elected. As previously stated, Polk County Horticultural Society is interested.

Parkersburg, W. Va.—Paper Bottles, etc.—Parkersburg Paper Package Co. will establish plant for manufacturing paper milk bottles, mailing tubes, oyster and ice-cream pails, etc. Patent is controlled by C. F. Jenkins, Washington, D. C., and new plant will be managed by Forrest Goff. Offices have been secured in the Boreman Building.

Parkersburg, W. Va.—Manufacturing.—Cecil-Jones Manufacturing Co. incorporated with \$10,000 capital stock to manufacture and deal in roofing, tinware, slate and tile by W. H. Cecil, P. L. Jones, S. E. Archer and others.

Quincy, Fla.—Tobacco Factory.—E. E. Dumbler Company incorporated with \$50,000 capital stock by J. E. Mayton of Quincy, E. V. Remington of Oklahoma City, O. T., and others.

Quincy, Fla.—Tobacco Factory.—Carter Tobacco Co. incorporated with \$12,500 capital stock; J. C. Carter, president, secretary and treasurer.

Rock Hill, S. C.—Gas Plant.—W. S. Lee and L. C. Harrison, Charlotte, N. C., have submitted proposition to City Council to establish gas plant.

Rogers, Ark.—Cannery.—Nelson Canning Co., recently reported incorporated, has elected Roy Nelson president, B. F. Julian vice-president and A. M. Ireland secretary-treasurer; capital stock \$5000. Company will erect and equip two buildings, 40x80 feet, at cost of \$2000 for buildings and \$4000 for machinery; capacity, 1000 cases canned goods per day.

Rome, Ga.—Chemical Works.—Rome Chemical Co. incorporated with \$10,000 capital stock to manufacture commercial fertilizers, sulphuric acid, acid phosphates, etc., by H. C. Fisher, H. M. Fisher, W. E. Richards, John W. Robinson and others.

Salado, Ark.—Broom Factory.—Salado Farmers' Union will establish broom factory.

Sandersville, Ga.—Ice-cream Manufacturing.—Purity Ice Co. contemplates establishing ice-cream plant in connection with ice factory. (See "Machinery Wanted" column.)

St. Louis, Mo.—Manufacturing.—Rawlings Manufacturing Co. incorporated with \$10,000 capital stock by C. W. Scudder, W. P. Whitley, C. H. Engels and P. C. Weber to manufacture athletic and sporting goods.

St. Louis, Mo.—Balloon and Airship Factory.—Reported that the American Airship & Balloon Corporation, New York, N. Y., organized with \$200,000 capital stock, will erect frame aerodrome in St. Louis, 80 feet high and 200x300 feet, to be used for manufacturing and housing balloons and airships. It is understood that \$100,000 will be expended on equipment alone, including a hydrogen-gas compressing plant. Company is said to be considering the purchase of 40 acres, portion of which will be used for balloon concourse, and will arrange to accommodate 50,000 spectators; Charles J. Strobel, president and general manager. (This company lately reported organized, under Norfolk, Va., with \$200,000 capital stock and Mr. Strobel president.)

St. Louis, Mo.—Athletic Goods.—Rawlings Manufacturing Co., 23d street and Lucas avenue, recently reported incorporated with \$10,000 capital stock by C. W. Scudder and others, will establish plant for the manufacture of athletic goods; W. P. Whitley, manager.

Tonkawa, O. T.—Oil-burners.—Crude Oil Burner Co. incorporated with \$12,000 capital stock by Monroe Davis, Bernie A. Cockrell, Gilbert A. Hunsaker and others.

Warrensburg, Mo.—Farm and Manufacturing.—Roseland Farm & Manufacturing Co. incorporated with \$15,000 capital stock by William Shockley, George W. Kelly and Geo. W. Warnick.

Washington, D. C.—Iversen Manufacturing Co. incorporated with capital stock of \$100,000 by R. S. Knapp, 1734 T street N. W.; E. W. McCormick, Corcoran Building, and H. W. Phillips.

Wheeling, W. Va.—Distillery.—Kraus & Co. incorporated with \$100,000 capital stock to manufacture and deal in spirituous liquors, wines, etc., by Solomon Kraus, F. H. Hanke, Edward S. Hirsch and others; main office, 1133 Market street.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Galveston, Texas.—Galveston, Houston & Henderson Railway will have plans prepared by Lang & Wittich, Dallas, Texas, for erection of machine shop at Galveston to cost about \$15,000.

Newport, Ark.—St. Louis, Iron Mountain & Southern Railway, James W. Way, consulting engineer, St. Louis, Mo., is reported to build six-stall roundhouse in Newport.

Paducah, Ky.—Illinois Central Railroad awarded contract to Webster Manufacturing Co., Chicago, Ill., to construct coal chutes recently mentioned; plans by R. E. Gaut; frame; mill construction; 35x37 feet; 600 tons capacity; operated by two 25-horsepower motors; H. R. Safford, chief engineer maintenance of way.

Shreveport, La.—Kansas City Southern Railway, A. F. Rust, resident engineer, Kansas City, Mo., is reported to enlarge shops and yards and lower tracks at Madison avenue, where steel viaduct will be built.

Tengue, Texas.—Trinity & Brazos Valley

Railway, P. G. Burns, chief engineer, Fort Worth, Texas, is reported to enlarge shops and roundhouse and build 12 miles of additional trackage.

ROAD AND STREET IMPROVEMENTS

Alexandria, Va.—City is considering the paving of King street with vitrified brick and widening of Hoof's Run bridge to conform with street. Address The Mayor.

Asheville, N. C.—Big Ivy township will vote on issuance of \$15,000 or \$20,000 of bonds for road macadamizing. Address County Commissioners.

Clarksville, Ga.—City has voted bonds to macadamize streets; work to commence about January, 1908. Address The Mayor.

Clarksville, Ark.—City will lay concrete sidewalks. Contract will be awarded November 15. Sam Laser is chairman Board of Improvement of Sidewalk District No. 1. (See "Machinery Wanted" column.)

Durham, N. C.—Board of County Commissioners will withhold bids for 90 days for grading and macadamizing Roxboro road; 1½ miles; estimated cost, \$5000 per mile; A. D. Markham, chairman of board; M. G. Markham, clerk; Gilbert C. White, engineer. (Recently mentioned.)

Gastonia, N. C.—J. W. Haas, Charlotte, N. C., has contract to lay cement sidewalks on Main street. It is also probable that sidewalks on South street will be paved. (City was previously reported as having awarded contract for bitulithic pavement.)

New Orleans, La.—Huston Engineering Co., 613 Mecheba Building, which recently received contract for curb and gutter and drainage construction preparatory to street paving, expects to begin work within 30 days. Contract involves six or seven streets and will amount to about \$10,000. It will be completed in about eight months.

Norfolk, Va.—City will extend Lovitt avenue, expending about \$15,000. Address The Mayor.

Oklahoma City, O. T.—City will award contract November 11 for another 16 blocks of paving. The R. F. Conway Company, Chicago, Ill., J. E. Bell, local manager, will soon begin the paving of 49 blocks of streets, requiring 75,000 square yards of asphalt and costing about \$225,000, for which the company was recently reported as having been awarded contract. J. O. Severin has sub-contract for sewers, manholes and catch-basins.

Richmond, Va.—H. S. Bradley has contract for grading and graveling Cowardin avenue and for placing 40 concrete steps at bridge leading from Manchester to Belle Isle.

Stamford, Texas.—City will vote on issuance of \$16,000 of bonds for street improvements. Address The Mayor.

St. Augustine, Fla.—B. E. Pacetti has contract for paving San Marco avenue with vitrified brick; M. G. Carraen, City Clerk. (Recently mentioned.)

Valdosta, Ga.—Georgia Engineering Co., Augusta, Ga., has contract at \$1.50 per square yard for paving portion of Patterson street with brick.

SEWER CONSTRUCTION

Meridian, Miss.—Sewer committee will consider construction of sewer system in cotton-mill district to cost about \$7000.

Monroe, Ga.—City's contemplated vote on issuance of \$30,000 of bonds is for sewerage system only; J. B. McCrary of Atlanta, Ga., is the engineer in charge.

Smithfield, N. C.—Committee on sewer and water-works construction and electric-light plant has selected Holmboe Company, Lincoln Savings Bank Building, Louisville, Ky., to prepare plans and specifications. Election will be held later to vote on bond issue for the work. (Recently mentioned.)

Versailles, Ky.—City has voted \$60,000 of bonds for construction of sewer system and water-works. Address The Mayor.

Washington, D. C.—District Commissioners Henry B. F. Macfarland, Henry L. West and Jay J. Morrow have approved orders for construction of sewers in Albemarle street N. W. and Adams street, Anacostia, and following water mains: 350 feet 8-inch in Porter street N. W., 80 feet 8-inch in 37th street N. W., 350 feet 8-inch in Ohio avenue N. W., 220 feet 4-inch in Keating avenue N. E., 750 feet 8-inch in Myrtle avenue and 480 feet 8-inch in Ingraham street N. W. Work will be done under supervision of Capt. Jay J. Morrow, Engineer-Commissioner.

TEXTILE MILLS

Ashburn, Ga.—J. S. Shingler, T. J. Shingler, W. C. Powell and R. E. Royal will form

company with capital stock of \$350,000 to build cotton mill.

Blacksburg, Va.—Blacksburg Mills has been organized by G. Lang Anderson and James P. Gossett of Williamston, S. C., to build cotton mill. Mr. Anderson was lately reported as proposing such an enterprise.

Blacksburg, S. C.—Whittaker Cotton Mills is reported to have decided to double its equipment and as having contracted for the new machinery; present installation is 5000 spindles.

Charlotte, N. C.—D. A. Tompkins is reported as negotiating with a braided-tape manufacturer of Fall River, Mass., relative to establishing tape mill in Charlotte.

Cheraw, S. C.—Cheraw Cotton Mills incorporated with capital stock of \$150,000 and to organize with James Dillingham of 256 Church street, New York, president, and A. G. Kollock of Darlington, S. C., treasurer and manager. Will plan to build cotton-mill of 10,000 spindles and 300 looms. Electricity will probably be used for power; J. E. Shirrine of Greenville, S. C., to be architect-engineer in charge.

Chickamauga, Ga.—Crystal Springs Bleachery Co., previously reported in detail, is proceeding with construction of its buildings; plant to include bleachery, finishing department, bag mill and steam power plant; building to be 80x470 feet; power-house, 70x80 feet; bleachery, about 80x50 feet; finishing department, 50x150 feet; bag mill, 50x160 feet; smokestack, 110 feet high, and contract for it awarded to Alphons Custodia Chimney Construction Co. of New York and Atlanta. Adams & Schneider of Chattanooga, Tenn., have contract for buildings, as stated recently. Steam power plant will include two 290-horsepower boilers and cross-compound engine of 300 horse-power.

Concord, N. C.—Franklin Cotton Mills reported as planning to double present plant of 7000 spindles.

Concord, N. C.—Hanover Manufacturing Co. incorporated with capital stock of \$150,000 to manufacture cotton goods by Lewis W. Brander of Concord, William M. Greenwood and Walter S. Savage of New York.

Morristown, Tenn.—H. C. Gildard of Knoxville, Tenn., is reported as planning organization of company with \$150,000 capital stock to build mill of 9000 spindles and 200 looms for manufacturing invertible cotton cloth for rubber and linoleum trade.

Rock Hill, S. C.—Harris Manufacturing Co. is reported to have secured plans and specifications for erection of 75x300-foot building for its cotton-yarn and collar-pad plant recently announced.

Whitney, N. C.—Capitalists contemplate organizing corporation to build large cotton mill to be operated by electricity obtained from the distribution of the Whitney Company, which expects to be furnishing 40,000 horse-power in 1908. Present status of plans for this enterprise do not warrant the announcement of the names and addresses of those interested, but if plans materialize full particulars will be stated.

Winona, Miss.—Winona Cotton Mills is reported as to expend \$12,000 for new additional machinery; present equipment, 6000 spindles and 200 looms.

WATER-WORKS

Atlanta, Ga.—Plans are being considered for construction of new water-works reservoir to contain 350,000,000 gallons, with about 250,000,000 gallons available. R. M. Clayton, City Engineer, estimates the cost at \$30,000. Work, which will probably be done by county convict labor, is expected to begin about January 1; Frank Rice, president of Water Board. (Previously mentioned.)

Claremore, I. T.—City has voted \$40,000 of bonds for extension of water-works. Transmission line will be built from city limits to Verdigris river, a distance of five miles, necessitating the purchase of eight-inch cast-iron pipe, water filter and electrical supplies; power to be furnished by electric-light plant; engineer in charge, Geo. W. Chalfont; W. P. Johnson, clerk. (See "Machinery Wanted.")

Columbus, S. C.—E. N. Chishold, City Engineer, will soon begin making surveys for eight or 10-inch water mains to be laid on Main street at a cost of \$12,000 preparatory to permanent street improvements. Work will probably be undertaken by the city. (Recently mentioned.)

Eldorado, Ark.—Eldorado water-works committee contemplates installing water-works and will engage M. P. Jackson to make surveys. About \$25,000 will be expended.

Eureka Springs, Ark.—C. D. James, chairman Board of Water and Sewer Commissioners, is considering plans for improvement

of city water reservoir and has about concluded to create another improvement district, to include entire city, to build additional cement-lined reservoir and later improve present reservoir in same manner. Cost is estimated at \$12,000.

Harrisonville, Mo.—City has voted \$30,000 of bonds for construction of water-works. Address The Mayor.

Norfolk, Va.—City will award contract November 18 for furnishing and installing 3000 water meters and boxes, for which \$50,000 was recently mentioned as being appropriated; H. Hodges, chairman Board of Control. (See "Machinery Wanted" column.)

Pulaski, Va.—City will vote on issuance of \$75,000 of bonds to secure water supply. It is planned to force wells in mountains south of town, the estimated cost of which is between \$25,000 and \$30,000. Address The Mayor.

Roanoke, Va.—Roanoke Gas & Water Co. will lay about four miles of 10 to 18-inch mains to property recently noted to have been purchased; will build new pumping plant during winter or early spring, with probable daily capacity of 5,000,000 gallons, consisting of two 2,500,000-gallon units; wells will be drilled on new property. H. H. Raughman is superintendent of works.

Smithfield, N. C.—Committee on water-works and sewer construction and electric-light plant has selected Holmboe Co., Lincoln Savings Bank Building, Louisville, Ky., to prepare plans and specifications; election will be held later to vote on bond issue for the work. (Recently mentioned.)

Sparks, Ga.—City has voted \$20,000 of bonds for construction of water-works and electric-light plant. Address The Mayor. (Recently mentioned.)

Sulphur Springs, Ark.—Smith & Power are preparing plans for combined water-works and electric-light plant to cost about \$25,000.

Tulsa, I. T.—City is considering purchase of local water-works at \$177,000. Address The Mayor.

Temple, Texas.—City will purchase Temple Water-Works Co. plant for \$120,000; will also expend \$30,000 in improvements; new pumping station (with exception of pumps) will be erected in city; at river station, five miles from city, two new boilers will be installed to operate two pumps of 1,000,000 and 1,500,000 gallons, respectively, against head of 230 feet; later improvements, to be made next year, will include installation of 14 or 16-inch mains to river and laying of additional larger mains over portions of city; City Engineer R. T. Smith has charge. (Bond issue of \$150,000 recently mentioned.)

Versailles, Ky.—City has voted \$60,000 of bonds for construction of water-works and sewerage system. Address The Mayor.

WOODWORKING PLANTS

Atlanta, Ga.—Ware-Hatcher Furniture Co. will erect building; three stories; floor space 33x156 feet; brick; cost \$5000.

Atlanta, Ga.—Buggy Factory.—Atlanta Buggy Co. will erect building; four stories; floor space, 65x150 feet; brick; cost \$25,000.

Clarksburg, W. Va.—Ransel Johnson has purchased plant of former Colonial Chair Co., recently noted as Clarksburg Chair Co., will establish a woodworking plant and install machinery, but plans for same are not fully decided. Plant includes cement structure 40x150 feet, boiler and engine-room, office building, kilns, etc. (See "Machinery Wanted.")

Decatur, Ala.—Basket Factory.—N. B. Hall & Sons will rebuild basket factory recently reported burned at a loss of about \$50,000.

Forrest City, Ark.—Armour Packing Co., Chicago, Ill., is reported as contemplating establishment of tub factory in Forrest City.

Forrest City, Ark.—Lieb & Little, Paducah, Ky., contemplate establishing stave factory in Forrest City.

Gabbettville, Ga.—G. T. Traylor contemplates establishment of excelsior mill. (See "Machinery Wanted" column.)

Houston, Texas.—Houston-Liggett Lumber Co., Box 231, recently reported incorporated, will operate sawmill and manufacture boxes, box shooks, crates, etc.; plant already established; president and general manager, W. G. Liggett; vice-president, J. S. Rice; secretary and treasurer, H. G. Green.

Kennett, Mo.—Kennett Furniture Co. incorporated with \$10,000 capital stock by Herman Sachs, William F. Shelton, William F. Shelton, Jr., and others.

Mena, Ark.—Layson Lumber Co. will establish plant for manufacturing doors, window sashes, moldings, etc. Building has been

completed and machinery is now being installed.

Montgomery, Ala.—Hat Rack Co. incorporated by T. C. Watts, Allen McNeel and S. M. Hubbell.

Montgomery, Ala.—L. L. Gilbert, recently noted to have purchased Montgomery Trunk Co.'s factory, will continue plant under same name; no equipment needed; capacity of plant, 40 trunks weekly.

Prescott, Ark.—La Crosse (Wis.) Cooperage Co. is reported to have purchased 3680 acres of timber land and to establish stave factory near Prescott.

Spartanburg, S. C.—Rigby Manufacturing Co. incorporated with \$25,000 capital stock; W. A. Lawton, president and treasurer; Y. J. Boozer, secretary and manager; will engage in the manufacture of doors, sash and blinds and building material. (Recently noted to have purchased plant of Rigby Manufacturing Works.)

St. Joseph, Mo.—Wallace Incubator Co. incorporated with \$10,000 capital stock to manufacture incubators by Huston Wyeth, L. C. Hamilton, John S. Brittain and others.

Sutton, W. Va.—Milburn Wagon Co. will establish hub and spoke factory.

Wades, N. C.—Wadesboro Furniture Co., recently noted incorporated, has elected G. W. Huntley president and Walter E. Brock secretary and treasurer. Mr. Brock is temporary manager.

Winnfield, La.—Winnfield Hardwood Manufacturing Co. organized with \$50,000 capital stock by C. E. Freed, H. McGinty, J. D. Pace and others to manufacture hardwood lumber, shingles, laths, vehicles and vehicle material. It is proposed to build sawmill and finishing plant. (Michigan capitalists were previously reported as having purchased hardwood timber land near Winnfield and to establish hardwood mill and finishing plant in charge of C. E. Freed.)

Wise, Va.—Reported that L. O. Pettit, Big Stone Gap, Va., and associates have purchased 5000 acres of timber land near Wise and will establish chair and furniture factory.

BURNED

Altus, O. T.—Chickasha Cotton Oil Co.'s hullhouse; loss \$7000.

Ashdown, Ark.—Moore & German's sawmill.

Bartlett, Texas.—Fowler Bros.' cotton gin; loss about \$10,000.

Cairo, Ga.—J. T. Ham's turpentine still; loss \$3000.

Charleston, W. Va.—Ruffner Bros.' store building; loss \$200,000.

Checotah, I. T.—Missouri, Kansas & Texas Railway Co.'s freight and passenger depot; loss \$5000; S. B. Fisher, consulting engineer, St. Louis, Mo.

Cheraw, S. C.—C. F. Moore's cotton gin; loss \$5000.

Comanche, I. T.—Stanley Hotel; loss \$7000.

Corbin, Ky.—City Bakery, operated by Dr. P. Logan; loss \$11,000.

Corinth, W. Va.—Oakland Coal & Coke Co.'s plant.

Dallas, Texas.—Building owned by Christian Weichsel and occupied by R. T. Dennis and Wigney Furniture Co.; loss on building about \$60,000.

Ellisville, Miss.—Anchor Sawmill Co.'s dry-kiln; loss about \$3000.

Elm City, N. C.—Dennis Simmons Lumber Co.'s kiln and hotel.

Eufaula, I. T.—Missouri, Kansas & Texas Railway Co.'s passenger depot; loss \$3000; S. B. Fisher, chief engineer, St. Louis, Mo.

Hagan, Va.—E. R. King's store building; loss about \$18,000.

Hagerstown, Md.—Hagerstown Wagon & Carriage Co.'s storage building and black smith shops; loss about \$4000.

Laurens, S. C.—Enoch G. Michell's cotton gin at Mount Bethel.

Louisburg, N. C.—Louisburg Oil Mill Co.'s cottonseed-oil mill.

Louisville, Ky.—Bourbon Stock Yard Co.'s stock yards; loss \$250,000; H. L. Vissman Packing Co.'s plant; loss \$75,000.

Lynnville, Tenn.—J. L. Wiggs and Polk Blackburn's sawmill.

Madill, I. T.—Madill Twice-a-Week News; Madill Opera-house and Madill Steam Laundry; total loss about \$12,000.

Marshall, Texas.—Marshall Car Wheel & Foundry Co.'s plant; loss about \$100,000.

Monterey, Tenn.—W. C. Ledbetter Hotel; loss \$5000; J. M. West's store building; loss \$8000; William Horn's skating rink; loss \$1000.

Mountain Lake Park, Md.—Mountain Lake Park Association building; loss about \$4000.

Northport, Ala.—Henry Snyder's cotton gin; loss about \$2500.

Oneonta, Ala.—The Guthrie Hotel; loss \$15,000.

Pine Beach, Va.—Cosmopolitan Hotel and Arcade, owned by A. Browne and Addie E. Gaylord, Norfolk, Va.; loss \$6500; Midway Arcade, owned by M. Joo, J. W. Mortimer and C. C. Watt, last named of Newport News, Va.; loss \$3000.

Pinson, Tenn.—Farmers' Union Warehouse; loss \$8000.

Plattsburg, Mo.—Laclede Hotel; Henry McIntyre, proprietor.

Saginaw, Ark.—W. G. Ray's gin and grist mill; loss \$1500.

Salisbury, N. C.—Mansion House, owned by E. C. Gregory and W. B. Strachan; loss \$30,000.

St. Petersburg, Fla.—Hibbs Supply Co.'s warehouse.

Washington, D. C.—Building used by Bureau of Seed Distribution of Department of Agriculture at 321-323 C street S. W.; loss \$20,000; A. O. Bliss, 35 B street N. W., is owner of building.

BUILDING NOTES

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

APARTMENT-HOUSES

Chattanooga, Tenn.—George Fritcher is having plans prepared by Bearden & Foreman for erection of apartment-house and store building; two stories; brick; 42x56 feet; contain three storerooms and two five-room apartments; cost \$12,000.

Chattanooga, Tenn.—J. J. Sullivan has awarded contract to Adams & Schneider for erection of store and apartment-house; two stories; 27x85 feet; brick; cost about \$7000.

Kansas City, Mo.—Edgar C. Faris is preparing plans for erection of apartment-house; three stories; 40x65 feet; brick and stone; cost \$30,000.

Kansas City, Mo.—W. W. Goodwin Securities Co. will erect apartment-house; five stories; 59x120 feet; cost \$75,000; plans prepared by Rudolph Markgraf, Shukert Building.

Kansas City, Mo.—Herman Striecher is having plans prepared by Matt O'Connell, New Ridge Building, for erection of apartment-house; brick, stone and terra-cotta; cost \$100,000.

Oklahoma City, O. T.—William Carson has secured permit to erect apartment-house 48x170 feet, to cost \$10,000.

Staunton, Va.—Larner & Smith have contracted with A. E. Harnsberger to excavate and build foundations and do cement work for cement-block apartment-house.

St. Louis, Mo.—F. X. Naughton will erect two two-story apartment-houses at a cost of \$10,000.

St. Louis, Mo.—R & B Trade Co. will erect two two-story apartment-houses at a cost of \$5000.

Washington, D. C.—Guy M. Neely, 254 11th street S. E., will erect store and apartment-house at corner 11th and C streets S. E.; brick and stone trimmings; slate and tin roof; sheet-metal work; terrazzo floors; electric wiring and fixtures; sanitary plumbing; hot-water heating system; J. L. Parsons, 133 1/2 street and Pennsylvania avenue N. W.; S. H. Maddox, 714 3d street S. E.; I'per & Kenyon, 729 15th street N. W.; G. W. Barkman, 721 A street S. E.; Wm. H. Yost & Bro., 1002 Pennsylvania avenue S. E.; Ferdinand Espey, 412 10th street S. E., and Hutchinson & Haroin, 211 12th street N. W., estimating.

CHURCHES

Atlanta, Ga.—Baptist Tabernacle and Institute has accepted plans by R. H. Hunt, Chattanooga, Tenn., for erection of proposed buildings; auditorium with seating capacity of 5000; three-story working girls' home, accommodating 100; nurses' dormitory and training-school, and four-story infirmary, with accommodations for 150. About \$250,000 will be expended; Dr. Len G. Broughton, principal promoter.

Columbia, S. C.—First Presbyterian Church contemplates expending about \$16,000 in improvements. Heating plant is now being installed. C. H. Baldwin is chairman board of deacons.

Crowley, La.—Methodist congregation,

Rev. W. Winans Drake, pastor, contemplates erecting edifice at a cost of \$20,000.

Dunn, N. C.—Presbyterian Church will erect at cost of \$4000 church edifice for which H. C. Lithicum, Durham, N. C., was recently noted to prepare plans; brick; slate roof; seating capacity 250; electric lighting; contract not let; pastor, Rev. A. R. McQueen.

Elizabeth City, N. C.—Blackwell Memorial Church has had plans prepared by Arnold Eberhardt, Bank of Commerce Building, Norfolk, Va., for erection of additions to edifice.

El Reno, O. T.—First Christian Church has not yet employed architect to prepare plans for church edifice recently mentioned. Lot is 118x80 feet. As proposed, building will be brick; mill finish; tile roof; steam heat; electric and gas lighting; cost \$25,000; O. L. Smith, pastor.

Ferriday, La.—Methodist Episcopal Church South, Rev. S. J. Davies, pastor, will erect edifice; W. R. Simmons, D. D. Wood and W. M. Hunt, building committee.

Hattiesburg, Miss.—Baptist Church has not selected architect to prepare plans for edifice recently mentioned; to contain auditorium, Sunday-school department and classrooms; brick and stone; heating not decided; electric lighting; cost \$25,000; may open bids in February; J. N. McMillin, pastor.

Latta, S. C.—Baptist congregation will erect edifice recently mentioned; architect not engaged; ordinary brick; about 50x60 feet; auditorium, school, dressing-rooms and library; entire seating capacity about 400; sliding partitions; possibly acetylene-gas lighting; may wire for future electric lighting; cost \$7000. W. C. Allen may be addressed. (See "Machinery Wanted.")

Mooreville, N. C.—Methodist church will erect edifice at a cost of \$20,000. Construction work has begun. Gaston Metal & Roofing Co., Raleigh, N. C., has contract for roofing and cornice work.

Richmond, Va.—Northside Baptist Church, Rev. C. B. Arendall, pastor, has had plans prepared by a Richmond architect for erection of granite edifice on Chestnut Hill to cost about \$12,000. Contract will soon be awarded.

Runge, Texas.—Baptist church has had plans prepared by J. F. Walker, San Antonio, Texas, for edifice recently mentioned; contract to be let November 20; concrete block; 40x50 feet; cost about \$6000; D. P. Airhart, chairman building committee. (See "Machinery Wanted.")

COURTHOUSES

Canyon, Texas.—Randall county contemplates voting on issuance of \$60,000 of bonds for erection of courthouse. Address County Commissioners.

Houston, Miss.—Board of Supervisors of Chickasaw county have adopted plans by R. H. Hunt, Chattanooga, Tenn., for erection of proposed courthouse, to cost about \$65,000. Contract will be awarded December 1. (Recently mentioned.)

Leesville, La.—Police Jury of Vernon parish, C. K. Onkes, clerk, has awarded contract to W. C. Whitney, Beaumont, Texas, at \$88,000 for erection of courthouse; C. H. Page, Jr., & Bro., Austin and Houston, Texas, architects. (Recently mentioned.)

Ocala, Fla.—Bids will be received at Treasury Department, office of James Knox Taylor, supervising architect, Washington, D. C., until December 19 for construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of United States postoffice and courthouse at Ocala in accordance with drawings and specifications, copies of which may be obtained at above office or office of custodian of site at Ocala at discretion of supervising architect.

DWELLINGS

Asheville, N. C.—A. H. McCormick has purchased site on which to erect several dwellings.

Baltimore, Md.—Walter L. Westphal, builder, 1700 North Bond street, will erect 124 two-story brick dwellings with modern conveniences on Potomac, Fayette, Hare and Canton streets and Fairmont avenue to cost about \$150,000.

Biloxi, Miss.—E. C. Joullian has had plans prepared by W. T. Harkness for erection of residence; one and a half stories; eight rooms; sanitary plumbing. H. B. Lizana will be in charge of erection.

China Grove, N. C.—Moses Ketner will erect residence.

Clarksburg, Ga.—W. R. Asbury is erecting proposed two-story residence; cost \$5000.

Dallas, Texas.—Frank Shanks has awarded contract to De Fries & Padgett for erection of two-story nine-room residence.

Dallas, Texas.—John H. Dean will have plans prepared by Lang & Wittich for residence to cost about \$5500.

Dallas, Texas.—Lee Caruthers has secured permit for erection of two-story frame residence in Munger Addition, to cost \$4500, after plans by Sanguinetti, Staats & Hill.

Dallas, Texas.—C. Weichsel will erect residence in Munger Place costing about \$30,000.

Durham, N. C.—John R. Proctor will erect residence at a cost of \$8000; Wilkerson Bros., contractors.

El Paso, Texas.—J. W. Port will erect brick residence at cost of \$6000.

El Paso, Texas.—H. E. Schubert will erect brick residence at a cost of \$6100.

Louisville, Ky.—E. R. West has purchased site 60x200 feet on which to erect residence to cost \$4000.

Lynchburg, Va.—Mrs. Maud Miller Walker awarded contract to J. W. Fellers for erection of residence recently mentioned; plans by Mr. Johnson; colonial style; 15 rooms; 14x62 feet; electric and gas lighting; cost \$4500.

Mandeville, La.—Lewis L. Morgan, Covington, La., is having plans prepared for erection of two dwellings in Mandeville.

Nashville, Tenn.—Samuel Hirsch will erect colonial residence at a cost of \$10,000.

Shreveport, La.—E. I. Brown's residence, contract for which was recently noted awarded to A. Benoit, will be of ordinary construction, with gas heating and electric lighting; cost, \$5100; architect, C. W. King.

Wilmington, N. C.—St. Andrew's Presbyterian Church is having plans prepared for erection of manse to cost between \$4000 and \$6000 for its pastor, Rev. A. D. McClure.

HOTELS

Asheville, N. C.—B. Burnette and W. H. Lasater are reported to erect eight or nine-story hotel.

Athens, Ga.—Athens Hotel Co., Billups Philizy, president, has had plans prepared by A. Ten-Eyck Browne, Atlanta, Ga., for erection of proposed hotel; 98x130 feet; five stories; red brick; white trimmings; palm-room on second floor with glass walls and roof; four upper floors to contain 112 rooms, all with private baths; fireproof; steam heat; electric lighting and elevators; cost, \$150,000. Contract was recently mentioned awarded to Miles & Bradt, Atlanta, Ga.

Chattanooga, Tenn.—Harry Van Dusen, proprietor of Northern Hotel, has awarded contract for erection of one-story addition, making the structure four stories high and providing 23 additional rooms, each connected with private bath. Improvements will also include installation of passenger elevator, and will cost about \$10,000.

Elkin, N. C.—Roaring Gap Summer Resort Co. incorporated by H. E. Fries, W. A. Blair, H. G. Chatham and others to conduct hotel, etc.

Fayetteville, W. Va.—John Hofmiller of Fayette county has purchased hotel from A. Williams and contemplates making improvements.

Frederick, Md.—Charles Wertheimer, David Lowenstein and associates will expend about \$25,000 in improvements to the City Hotel.

Gadsden, Ala.—J. A. Newcome, Macon, Ga., is reported as to lease Printup Hotel and invite bids for improvements costing \$30,000.

Hawkinsville, Ga.—J. Pape Brown and others have organized stock company to build \$30,000 brick hotel to replace hotel recently reported burned.

Landrum, S. C.—Landrum Hotel & Improvement Co. incorporated with \$9000 capital stock by J. S. Carpenter, D. F. Ezell and others.

Mandeville, La.—Henry and Gus Mugnier, proprietors of the Mugnier Hotel, have adopted plans by Diboll & Owen, New Orleans, La., for erection of 50-room annex to hotel.

Rocky Mount, N. C.—Leithner & Wilkins, Southern Building, Wilmington, N. C., are reported as having prepared plans for hotel to be built in Rocky Mount.

Stamford, Texas.—Plans have been prepared and bids are now being received for erection of addition to Stamford Inn to cost about \$40,000.

MISCELLANEOUS STRUCTURES

Anderson, S. C.—Business Buildings.—D. P. McBrayer, C. A. Reed, J. S. Fowler, Webb & Webb and others have purchased site 210x162 feet, which will be improved with brick buildings; purchase price, \$18,000.

Baltimore, Md.—Hall.—Grand United Order of Odd Fellows New Hall Association; 214

East Lexington street, will erect new hall 36x125 feet at 549-551 West Biddle street.

Baltimore, Md.—Store Building.—Gomprecht & Benesch, dealers in furniture and carpets, 316x320 North Eutaw street, will erect five-story addition 25x100 feet at 322 North Eutaw street.

Baltimore, Md.—Club Building.—Referring to extensive alterations and additions to building at northwest corner Madison and Charles streets for Baltimore Club, 916 North Charles street, the following contractors are estimating on work: John Cowan, 106 West Madison street; John Hiltz & Son, 3 Clay street; Edward Brady & Son, 1109 Cathedral street; Frederick Decker & Son, 1309 East Biddle street; B. F. Bennett, 123 South Howard street; C. L. Stockhausen, National Marine Bank Building; J. H. Miller, 110 Dover street; Morow Bros., 218 West Saratoga street; and Willard E. Harn, 2700 Huntingdon avenue; one-story addition, 29x60 feet, and two-story addition, 28x60 feet; entire reconstruction of interior; marble and mosaic tile work; telephone and pneumatic-tube systems; refrigerating plant; electric wiring and fixtures; sanitary plumbing; steam-heating system; two electric elevators; bids to be in November 19; Elliott & Emmart, architects, Union Trust Building.

Baltimore, Md.—Bank Building.—Clifton Savings Bank, 1059 North Gay street, will erect two-story banking structure to cost about \$12,000 at corner Broadway, Chase and Gay streets.

Charlotte, N. C.—Sanatorium.—Frank P. Milburn & Co., Home Life Building, Washington, D. C., have completed plans for proposed sanatorium for the Charlotte Sanatorium Co., D. A. Tompkins, president. Structure will be of pressed brick, four stories high, contain baths, etc. Contract was recently reported awarded to J. D. Brown.

Clarksville, Ga.—Business Building.—Dr. J. B. Jackson is erecting proposed two-story brick business building.

Durham, N. C.—Business Building.—Herbert Smith, contractor, will erect two-story business building; press brick; 27x95 feet.

Elizabeth City, N. C.—County Commissioners of Pasquotank county will open bids November 23 for erection of house of detention at County Home according to plans and specifications on file at office of J. G. Spence, Register of Deeds; usual rights reserved. (Recently mentioned.)

Florence, Ala.—Auditorium.—Joint committee of fraternal organizations, C. W. Ashcraft, chairman, is considering erection of auditorium. H. B. Austin, secretary, has prepared several alternative propositions, one to include complete building capable of seating 1200 people and not to cost over \$15,000 and another with seating capacity of 2000, to cost completed not more than \$20,000. Stock company may be organized.

Gainesville, Fla.—Masonic Temple.—Masonic Lodge is having plans prepared by S. H. Dempsey for erection of building; 100x66 feet; two stories; stone, brick and iron; lodgeroom on second floor, 40x60 feet; cost between \$17,000 and \$20,000. It is understood that contract will soon be awarded.

Galveston, Texas—Immigrant Station.—E. B. Holman, inspector in charge of Galveston station, advises that plans are not yet determined in regard to size, character and cost of immigrant station building recently mentioned. F. P. Sargent, Commissioner-General of Immigration, Washington, D. C., can give information.

Galveston, Texas—Store Building.—Henry Belssner will erect store building; two or three stories; brick. Bids are being received.

Greensboro, N. C.—Auditorium.—Chamber of Commerce will erect auditorium with seating capacity of between 7000 and 10,000; T. J. Murphy, chairman of committee in charge of plans.

Greensboro, N. C.—Store Building.—C. W. Jennings will erect building adjoining three-story structure now nearing completion; new building will be 44x90 feet; two stories; pressed brick and granite front; plate-glass windows.

Greenwood, S. C.—Grandy & Jordan, Columbia, S. C., have contract to erect Masonic temple to cost about \$17,000.

Knoxville, Tenn.—Store Building.—Jack Adcock will erect store building; two stories; brick; 50x70 feet.

Meadville, Miss.—Store Building.—J. S. Costley awarded contract to George W. Ritteringham, Natchez, Miss., for erection of two-story brick store building recently mentioned; to cost \$3500. (See "Machinery Wanted" column.)

Memphis, Tenn.—Business Building.—Bry Block Mercantile Co. will remodel six-story

brick business structure; 75x108 feet; steam heat; electric and gas lighting; architects, Shaw & Pfeil; contract not let. (Recently mentioned.)

Memphis, Tenn.—Y. M. C. A. Building.—Young Men's Christian Association is considering plans for erection of proposed building; site, 90x150 feet; six stories and basement; 700,000 square yards of floor space; basement will contain heating apparatus, swimming pool 20x30 feet, sanitary shower, needle, tub and Turkish baths; second floor will contain auditorium and gymnasium 50x90 feet; about 100 dormitories on upper floors; E. B. Lemaster, chairman of plans committee.

Nashville, Tenn.—Capitol Improvements.—State Capitol Commission has authorized Superintendent Sawyers to advertise for bids and contract for repairing concrete work about the capitol and necessary improvements to interior of building; Legislature has appropriated \$8000.

New Roads, La.—Jail.—N. P. Phillips, president Police Jury, Torras, La., will open bids November 26 for remodeling and enlarging Pointe Coupee parish jail according to plans and specifications by E. J. Hull, architect, Alexandria, La. Plans and specifications on file at office of E. G. Beuker, Sheriff, at New Roads; E. J. Hull, architect, at Alexandria, and N. P. Phillips at Torras; certified check, \$1000, payable to order of Mr. Phillips; usual rights reserved.

Pensacola, Fla.—Store Building.—A. Lischkoff will erect two-story brick store building.

Portsmouth, Va.—Store and Residence.—S. Goodman has awarded contract to W. H. Wilkins for erection of two-story brick store and residence to cost \$5500.

Princess Anne, Md.—Store Building.—R. S. and E. H. Cohn have awarded contract to W. P. Pusey & Son for erection of store building; pressed-brick fronts; limestone and bluestone trimmings. Structure will replace buildings destroyed by fire in August.

Richmond, Va.—Sanitarium.—Company has been organized to erect sanitarium by Robert Kirk, W. T. Hancock, W. M. Parrish and others.

Ridgedale, Tenn.—Home.—Old Ladies' Home Association, Mrs. W. E. Love, president, Chattanooga, Tenn., will erect brick and stone building, costing \$20,000, at Ridgedale, after plans by Huntington & DeSaba, News Building, Chattanooga, Tenn.

San Angelo, Texas—Livery Stable.—Cobb & Christy have awarded contract for erection of stone building to cost \$7000.

Shreveport, La.—Store Building.—J. H. Allen will erect at cost of \$100,000 store building, contract for which was recently noted awarded to Hugh McLennan, Chicago, Ill.; plans by Percy Bridges; building 50x150 feet; steam heat; electric lighting; freight and passenger elevators.

St. Augustine, Fla.—Convent.—Sisters of St. Joseph awarded contract to Halsema-Woodcock Construction Co., Jacksonville, Fla., for erection of annex recently mentioned; three stories, 28x58 feet; steam heat; gas and electric lighting; cost \$35,000.

Union, S. C.—Hospital.—Union Hospital Association will erect hospital at a cost of \$5000. Committee consisting of Crown Torrence, M. W. Culp and others has been appointed to select plans, etc.

Vass, N. C.—Hall and Storeroom.—Holly Mercantile Building Co., recently reported incorporated with \$25,000 capital stock by A. Cameron and others, will erect two-story 30x70-foot building for hall and storerooms; D. J. Everett, architect and contractor.

Wheeling, W. Va.—Store Building.—M. J. & C. A. McFadden have secured permit to erect brick, iron and steel building at a cost of \$50,000; plans by Glesey and Faris, who have charge of bids and construction; contract for brick work placed; four-story building; tile floors; fireproof; steam heat; electric and gas lighting; hydraulic elevator.

Winston-Salem, N. C.—Jail.—Forsyth County Commissioners have awarded contract to Fogle Bros. Company at \$27,850 for erection of annex to present county jail; addition to be of brick; three stories and basement; latter to be 36x76 feet; 48 additional cells; baths, etc.; fire and tool proof. Plans prepared by Frank P. Milburn & Co., Home Life Building, Washington, D. C., who will supervise construction. Structure will be built in three sections, costing \$64,000. (Recently mentioned.)

MUNICIPAL BUILDINGS

Baltimore, Md.—City will remodel school building on Saratoga near Charles street for temporary use as Central Police Station. Work will cost about \$15,000 and will be done under supervision of Inspector of Buildings Edward D. Preston, City Hall.

Bristol, Va.—Jail.—City Council has instructed building committee to obtain estimates on cost of erection of city jail and courthouse; committee desires correspondence relative to building and furnishing. John H. Gose, city clerk, may be addressed. (See "Machinery Wanted" column.)

Dallas, Texas—Hospital.—Ernest Wilks is lowest bidder at \$525 for erection of proposed union hospital by city and county according to plans by J. E. Flanders, 405 Main street. J. D. Kane is lowest bidder on plumbing; J. B. Winslett, City Secretary. (Recently mentioned.)

Jackson, Miss.—Fire Stations.—City rejected bids on fire stations recently mentioned; stations will be erected through city engineer's department; cost, \$10,000; buildings to be fireproof, with electric lighting; Mayor, Ramsay Wharton.

Little Rock, Ark.—Convention Hall and Market-house.—City is considering erection of convention hall and market-house, to cost about \$50,000; hall to seat about 10,000. Address Mayor Lenon.

Richmond, Va.—Armory.—Richmond Light Infantry Blues' armory building, recently mentioned, will be 124x168 feet; steam heat; electric lighting; electric elevators; cost \$155,000; architect, Chas. K. Bryant, 1014 East Main street; plans not ready for bids; as previously stated, first floor will be used as vegetable market.

Stamford, Texas—City Hall.—City will vote on issuance of \$4000 of bonds for improvement of city hall. Address The Mayor.

St. Louis, Mo.—Buildings.—F. W. Faulkner and James A. Smith, City Hall, have prepared plans for police patrol and wagon-house; two stories; 50x125 feet; brick, stone and terra-cotta; cost \$50,000. Drischler & Elmsler, Walnut Building, are preparing plans for reconstruction of west wing of poorhouse; brick and stone; gas and electricity; cost \$100,000; Andrew J. O'Reilly, president Board of Public Improvements.

OFFICE BUILDINGS

Chattanooga, Tenn.—Southern Express Co. has purchased the Southern Hotel property at \$50,000, and will expend about \$15,000 in improvements for office purposes.

Fort Worth, Texas.—Farmers Educational Co-operative Union of America, C. S. Barrett, president, will erect temple and office building, probably of brick, four or five stories high, in Fort Worth, where national headquarters will be removed from Little Rock, Ark. Fort Worth Trades Assembly is understood to be affiliated in the movement. Between \$150,000 and \$300,000 will be expended.

Jacksonville, Fla.—Florida Life Insurance Co. has not engaged architect to prepare plans for office building recently mentioned; six stories, 54x90 feet; cost about \$90,000.

Kansas City, Mo.—Midland Realty Co. will soon submit plans prepared by Howe & Hoyt to contractors for erection of Reliance building; gray brick; stone or gray terra-cotta trimmings; five stories; first floor to contain six storerooms and four upper floors 96 offices; cost \$80,000.

Mooreville, N. C.—Bank of Mooreville is reported to erect bank building.

Norfolk, Va.—Virginia Savings Bank & Trust Co. has purchased site at \$100,000 on which to erect bank and office building; J. W. Hunter, president.

Williamsport, Md.—Miller Bros. have contract for erection of Pythian hall in Williamsport; 40x80 feet; three stories; pressed-brick front with stone trimmings; first floor will be used as banking-room, second as theater and third as lodgeroom. Building will have slag roof, steam heat and electric lighting; cost \$10,000, not including heating and plumbing; architect, J. W. Woltz, Waynesboro, Pa.; architect and committee will let contract for heating and lighting.

Williamsport, Md.—Miller Bros. of Williamsport and Charles A. Drawbaugh, Waynesboro, Pa., have contract for erection of Pythian hall in Williamsport; 40x80 feet; three stories; pressed-brick front with stone trimmings; first floor will be used as banking-room, second as theater and third as lodgeroom; J. A. Woltz, Waynesboro, Pa., architect.

RAILWAY STATIONS

Birmingham, Ala.—Birmingham Terminal Co. is continuing under its own direction the construction involved in completing its station and terminals, from which work the Oliver Sollitt Company of Chicago has retired. It has completed a portion of baggage and express wings, and they, together with what will be a part of waiting-room, are being used as temporary waiting-rooms and working-rooms for company; half of

work on main waiting-room has been completed. From six to seven months will be required to complete the station building. W. H. Harrison is chief engineer in charge for Birmingham Terminal Co. P. Thornton Marye of Atlanta, Ga., is the architect. All contracts have been awarded for materials. (Previously fully detailed and referred to at various times.)

Clinton, S. C.—Columbia, Newberry & Laurens Railroad, W. G. Childs, president and superintendent, Columbia, S. C., will erect depot at a cost of \$8000.

Gadsden, Ala.—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., will build union passenger station in Gadsden.

Hannibal, Mo.—Chicago, Burlington & Quincy Railway, W. L. Breckinridge, engineer, Chicago, Ill., is reported to build \$100,000 depot at Hannibal.

Knoxville, Tenn.—Southern Railway Co. awarded contract to J. P. Pettyjohn & Son, Lynchburg, Va., for remodeling passenger station; plans by Frank P. Milburn & Co., Home Life Building, Washington, D. C.; work to commence at once.

Louisville, Ky.—Louisville & Southern Indiana Traction Co. has had plans prepared by D. X. Murphy & Bro. for erection of brick addition, 36x200 feet, to terminal station.

Wallalla, S. C.—Blue Ridge Railway, A. B. Andrews, president, Raleigh, N. C., is reported as to erect depot in Wallalla.

SCHOOLS

Antlers, I. T.—City will have plans prepared at once for erection of school building to cost about \$7000. Address The Mayor.

Athens, Tenn.—Board of Education has adopted plans by Adams & Alump, Chattanooga, Tenn., for erection of proposed school building; brick; 75x90 feet; two stories; four schoolrooms on first floor and three on second, with auditorium seating about 600; steam heat; cost \$15,000; W. Z. Long, chairman of building committee. (Bond issue of \$15,000 was reported voted last May.)

Chapel Hill, N. C.—University of North Carolina awarded contract to N. Underwood, Durham, N. C., for erection of biological laboratory and Davie Hall; plans by Frank P. Milburn & Co., Home Life Building, Washington, D. C.

DeWitt, Mo.—City contemplates erecting school building at a cost of \$10,000; H. Coleman, president of School Board.

Forest, La.—West Carroll School Board, Floyd, La., has appropriated \$3500 for erection of school building in Forest.

Franklin, La.—Building committee of High School, composed of James A. Peterman, Charles A. O'Neill and Melville L. Wilcox, has adopted plans by C. H. Page, Jr., & Bro., Austin and Houston, Texas, and awarded contract to Gulf Construction Co., Houston, Texas, at \$49,987, for erection of proposed school building; 150x30 feet; two stories and basement; pressed brick; heating apparatus, plumbing, etc. (Recently mentioned.)

Livington, Texas.—Free School Corporation has not yet engaged architect to prepare plans for school building recently noted to be erected at a cost of \$20,000; brick; two stories; to contain eight classrooms and assembly hall with 400 seating capacity; hot air or steam heating; electric lighting; Jas. E. Hill, Jr., president board of trustees.

Lometa, Texas.—Lometa Independent School District awarded contract to John F. Drew, Balinger, Texas, for erection of school building recently mentioned; plans by Scott & Lane, Waco, Texas; cost \$10,000.

Rutledge, Ga.—City has voted \$10,000 of bonds for erection of school building. Address The Mayor. (Recently mentioned.)

St. Louis, Mo.—Building committee of Board of Education, composed of George R. Lockwood, C. M. Woodward and others, has adopted revised plans by William B. Ittner, Commissioner of School Buildings, for erection of proposed school building to cost about \$700,000, original plans for which were prepared by Mr. Ittner about a year ago.

University, Ala.—University of Alabama will ask bids until November 23 for construction of engineering building and geological and biological laboratories, for which plans are nearly completed; engineering building to be of reinforced concrete or concrete with brick or stucco finish; new equipment will include two 100-kilowatt, direct-current generators direct-connected; 25-kilowatt, alternating-current generator; water-tube boilers, 500 horse-power, with coal-weighting and ash-removal plant; complete equipment for physical, cement-testing and road materials laboratories; mining and hy-

draulic equipment and heating plant. As stated in previous notices, architect is Frank Lockwood, Montgomery, Ala. Edgar B. Kay is dean of department of engineering.

Wakefield, N. C.—Wake County Board of Education, Raleigh, N. C., has adopted plans by C. E. Hartje, Raleigh, N. C., for erection of school building between Zebulon and Wakefield; two stories; brick; auditorium with seating capacity of 800; cost \$9500.

Washington, D. C.—Referring to bids to be received until November 16 for construction of six-room addition to Langdon School at 20th and Franklin streets N. E. by District Commissioners, the following contractors are estimating on construction: T. H. Melton, 621 F street N. W.; J. M. Dunn, 1324 5th street N. W.; Pavarini & Wynne, Munsey Building, and Burgess & Parsons, 627 F street N. W. Plans and specifications can be obtained from room No. 43, District Building.

Washington, D. C.—Referring to bids to be received until November 16 by District Commissioners for construction of McCormick School at northwest corner 4th and M streets S. E., the following contractors are estimating: T. R. Humphrey, 912 H street N. E.; Pavarini & Wynne, Munsey Building; W. E. Mooney, 1425 New York avenue N. W.; Burgess & Parsons, 627 F street N. W.; J. M. Dunn, 1324 5th street N. W.; T. H. Melton, 621 F street N. W.; J. H. Gibbons, 1314 North Carolina avenue N. E., and Allen T. Howison, 1701 Jackson street N. E.; two stories; brick with stone trimmings; structural iron and steel; terrazzo floors; heating and ventilating systems; sanitary plumbing; slate and tin roof; Harding & Upman, architects. Plans and specifications can be obtained from room No. 43, District Building.

Washington, D. C.—George A. Fuller Company, Munsey Building, was lowest bidder, at \$82,500, and not James L. Parsons, as reported last week, for construction of addition to McKinley Manual Training School at 7th street and Rhode Island avenue N. W. Full details recently reported. L. W. Norris, architect, 808 17th street N. W. Work will be done under supervision of Inspector of Buildings Snowden Ashford, District Building.

THEATERS.

Ellicott City, Md.—Robert Yates has purchased site 80x150 feet on which to erect concrete and granite theater with seating capacity of 2000; in basement will be roller-skating rink and bowling alleys.

Knoxville, Tenn.—Knoxville Auditorium Co., C. B. Atkin, president, is having plans prepared by Barber & Klutz for erection of proposed auditorium and hippodrome; main building 300x80 feet; arcade 50x92 feet. The "Old Homestead" will be remodeled as hotel. (Further details recently mentioned.)

Memphis, Tenn.—Orpheum Theater Co., Martin Beck, general manager, which controls theaters in El Paso, Texas; New Orleans, La., and other cities, will expend about \$20,000 for improvements to Grand Opera-house in Memphis, including installation of new electrical fixtures, opera chairs, etc.

Nashville, Tenn.—Reported that Jack Prince will erect building for amusement purposes to be known as the Velodrome; 270x150 feet; seating capacity, 6000.

WAREHOUSES

Cuero, Texas.—R. R. Flick awarded contract to Fuess & Allert for construction of warehouse recently mentioned; plans by Julius Leffland, Victoria, Texas; brick; two stories, 50x130 feet; ordinary construction; elevator purchased.

Gaffney, S. C.—Farmers' Warehouse Co., recently reported incorporated, will erect cotton warehouse; brick; one story, 75x140 feet; mill construction; cost \$7000; architects, Shand Engineering Co., Columbia, S. C.; bids for erection to be opened in spring, 1908; W. C. McArthur, secretary and treasurer.

Gause, Texas.—Farmers' Union Warehouse Co., incorporated by J. W. Adams, R. Barker, J. W. Davis, J. W. Pitts and others.

Gaffney, S. C.—Farmers' Warehouse Co., incorporated with \$8000 capital stock. R. C. Sarret is president and W. C. McArthur treasurer.

Gurley, Ala.—Farmers' Union Warehouse & Storage Co., organized with \$5000 capital stock to erect cotton warehouse at Gurley; J. T. Kelly, Mayaville, Ala., president; Joe Craig, Ownes Crossroads, Ala., vice-president; J. C. Essinger, secretary, and John C. Halslip, treasurer, both of Gurley.

Hastings, O. T.—Hastings Farmers' Union Co-operative Warehouse Co., incorporated with \$5000 capital stock by Martin V. Daniels, Richard B. Eckler, Joe M. McKinney and John E. Lindsay.

Hughes Springs, Texas.—Cass County Farmers' Union Warehouse Co., incorporated by S. M. Wells, I. W. Irvin, T. C. Phillips and others.

Lafayette, Ala.—Farmers' Union Warehouse Co., incorporated with \$9000 capital stock by J. J. Robinson Jr., J. C. Webb, Jr., T. C. Key, Webster McRae and others.

Mansfield, Ark.—Mansfield Warehouse Co., incorporated by John F. Williams, A. F. Dill, R. R. Landon and others.

Nashville, Tenn.—J. A. & O. L. Jones Mill & Elevator Co. will erect warehouse.

Ripley, Tenn.—Farmers' Union Warehouse Co., incorporated by W. H. Poindexter, C. N. Wilkes, L. F. Adcock and others.

Round Rock, Texas.—Farmers' Union Warehouse Co., Arthur Rutledge, president and manager, will erect \$1500 warehouse, 17x100 feet; sheet iron; derricks to be installed. (Company reported incorporated in August.)

RAILROAD CONSTRUCTION RAILWAYS

Atlanta, Ga.—J. H. Cook of Cook & Laury, contractors, of Montgomery, Ala., is reported to be investigating the proposition to build the Atlanta & Carolina Electric Railroad projected by Capt. James W. English, Dr. H. L. Wilson, R. V. Carter, T. J. Kelly and others of Atlanta.

Baton Rouge, La.—Tracklaying is reported under way on the cut-off line of Morgan's Louisiana & Texas Railroad between Baton Rouge and Lafayette, La., 52 miles.

Charleston, Miss.—The Yazoo & Mississippi Valley Railroad has completed and put in operation its branch from Charleston to Philip City.

Clay City, Ky.—Reported that the Mountain Central Railroad will be extended from Campton, Ky., to Hazel Green, 10 miles. J. C. M. Day is general manager at Winchester, Ky. He informs the Manufacturers' Record that the work will not be undertaken at present.

Dallas, Texas.—Surveys are reported under way for the Union Central Railroad from Dallas to the Louisiana boundary, and grading is finished for 20 miles out of Wortham, Texas, while surveys are completed for the branch from Wortham to Tyler, Texas, which will be 90 miles long. Main line is from Dallas via Wortham, Palestine and Nacogdoches, Texas, to Pickering, La., and road will be altogether 500 miles long, of which 225 miles are in Texas. J. A. Lucas of Edgewood, Texas, is secretary and treasurer.

Durant, O. T.—The Red River Railway Co., capital \$5,000,000, has been chartered to build a line 200 miles long from the Texas boundary north of Bonham, Texas, to Oklahoma City, including branches. It may ultimately be an electric railway. The incorporators are George F. Robertson of Atoka; E. M. Abernathy, S. C. Hawk and F. J. Hawk, Lexington; Albert Rennie, Pauls Valley; F. B. Kibbey of Byars, J. W. Hocker of Purcell and T. H. Bayless of Durant.

Dustin, I. T.—The Missouri, Oklahoma & Gulf Railroad will, it is reported, have 20 miles of line in operation by December 1 on the extension from Dustin toward Denison, Texas. The entire extension will be 125 miles long when finished.

Fairmont, W. Va.—The Alleghany Coal Railroad Co. has applied for a charter to build a line from Fairmont, in Marion county, southwest through Marion, Harrison, Lewis and Gilmer counties to Glenville, W. Va., on the Little Kanawha river; capital \$100,000; headquarters at No. 1 Broadway, New York city. The incorporators are Granville M. Dodge, Adolph Lewisohn and Uriah Herrman of New York city; Fairfax S. Landstreet of Davis, W. Va., and O. Harry Smith of Baltimore.

Fort Worth, Texas.—Reported that C. S. Young has been appointed chief engineer for the Fort Worth & Mineral Wells Interurban Electric Railway, which is under construction by the G. R. Turner Construction Co. out of Fort Worth.

Fort Worth, Texas.—President F. H. Britton of the St. Louis Southwestern Railway in Texas, is quoted as saying that preliminaries are about being completed for building the new freight terminals in Fort Worth, which will cost about \$500,000, and the financial situation will not delay the improvement. M. L. Lynch is chief engineer at Tyler, Texas.

Gilbert, La.—L. J. Smith of Kansas City has, it is reported, been given the contract to ballast the track of the Iron Mountain Division of the Missouri Pacific Railway in Arkansas and Louisiana.

Johnson City, Tenn.—President George L. Carter of the South & Western Railway is reported as saying that the company has 80 miles of line in operation and track is laid for 20 miles more. It is expected to have the road in operation all the way from Kant, Va., to Bostic, N. C., 210 miles, within a year. The line is to be extended northward from Kant 35 miles to Elkhorn City, Ky., to connect with the Chesapeake & Ohio Railway. M. J. Caples is chief engineer at Johnson City.

Lafayette, La.—Survey is reported begun for the Eunice, Lafayette & Abbeville Railway, work starting near Eunice. L. F. Lonnblad is chief engineer.

Memphis, Tenn.—Reported that the Illinois Central Railroad will elevate its track along the river front in Memphis. A. S. Baldwin is chief engineer at Chicago.

New Iberia, La.—The Manufacturers' Record is officially informed that the Bayou Teche Railway & Light Co. will build 17 miles of line between New Iberia and Jeanerette, La., work to begin by January 15. R. C. Huston of the Huston Engineering Co., 613 Machea Building, New Orleans, is the engineer in charge.

Honaker, Va.—The Grand River Lumber Co. of Pittsburgh is reported to have purchased 36,000 acres of timber land in Washington county from E. G. Boyd, and will build a railroad from Honaker to develop the land. Henry C. Stuart is reported to be interested. Connection will be made with the Norfolk & Western Railway, and C. S. Churchill, chief engineer of that road at Roanoke, Va., may be able to give information.

Okolona, Miss.—The citizens have voted an issue of \$30,000 of bonds to aid the Aberdeen & Tombigbee Valley Railroad.

Robert Lee, Texas.—The Robert Lee & Fort Chadbourne Railway Co. is reported to have completed one and one-half miles of grade on its line between Robert Lee and Fort Chadbourne, and twelve and one-half miles more are under construction. The line will run to Winters, Texas, 50 miles. E. Hunter is contractor and S. J. Bross is chief engineer at Robert Lee, Texas.

Rockland, Texas.—The Burr's Ferry, Brownell & Chester Railway Co. has, it is reported, laid four miles of track from Aldredge, Texas, eastward toward Brownell. This is in addition to seven miles of track laid east of Rockland. The line will be altogether 30 miles long when completed. An extension of 25 miles from Brownell to Burkeville is contemplated. P. G. Omohundro is chief engineer at Rockland, Texas.

Statesboro, Ga.—Track laying is reported begun on the Savannah, Augusta & Northern Railway, which is being constructed by William J. Oliver of Knoxville, Tenn.

Stanton, Texas.—Construction is reported begun on the West Texas & Northern Railway at Stanton, the line being promoted by S. G. Bondurant. The O'Donnell Contracting Co. is reported to have part of the contract. The line will be altogether about 500 miles long from Amarillo, Texas, to the Gulf of Mexico.

St. Louis, Mo.—The incorporators of the Chicago & East St. Louis Short Line, recently incorporated at Springfield, Ill., to build a steam railroad from St. Louis to Chicago, include H. C. Ostermann and William M. Drennan, treasurer of the Ostermann Manufacturing Co. of Pullman, Ill.; H. C. Dolph of B. Nicoll & Co., iron merchants; Thomas W. Flynn, attorney, and William Anderson of the Pullman Company of Pullman. Mr. Ostermann's address is 6534 Monroe avenue; Mr. Drennan's, 6923 Vernon avenue; Mr. Dolph's, 2251 Kenmore avenue, and Mr. Flynn's, "The Rookery," all at Chicago, Ill. Mr. Anderson is at Pullman, Ill.

Tecumseh, O. T.—The rapid Transit Interurban Co. of Tecumseh has been chartered in Oklahoma to build an electric railway from Muskogee via Tecumseh to Chickasha, I. T., 137 miles, with a cross line from Tecumseh to Guthrie, O. T., 55 miles, and from Tecumseh to Sulphur, I. T., making a total length of 277 miles. Capital \$2,500,000. The incorporators are John A. Clark, L. B. Mitchell, J. W. Saxon, G. M. Cissna, T. J. Ray and M. H. Tension, all of Tecumseh, O. T.

Thomasville, Ga.—Concerning the authorization of a bond issue by the Florida Central Railroad, the Manufacturers' Record is officially informed that the company has under construction its line from Thomasville southward about 50 miles to the sawmill town of Delph, Fla. Construction contracts are all let and work is well under way under the charge of Z. Middlebrooks, general manager, at Thomasville.

Tulsa, I. T.—The Sapulpa & Interurban Railroad Co. is reported to have begun con-

struction on its line from Sapulpa to the Glenn Pool oil fields, including a street railway in Sapulpa.

Velasco, Texas.—The St. Louis, Brownsville & Mexico Railway Co. will, it is reported, build a spur several miles long to the Lake Jackson plantation. E. C. Burgess is engineer at Corpus Christi, Texas.

STREET RAILWAYS

Shreveport, La.—John Lorenz of Jackson, Miss., is reported to be interested in a proposition to build a street-car line in Shreveport.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Axle Lathe.—See "Machine Tools."

Band Instruments.—T. McDowell Street, Seneca, S. C., wants to correspond with manufacturers of and dealers in brass-band instruments.

Boiler.—Sharon Tobacco Co., Quincy, Fla., wants boiler.

Boiler.—Bids will be received at Chief Quartermaster's Office, Atlanta, Ga., until November 26 for supply, f. o. b. cars at Port Royal, S. C., of one 30-horse-power boiler, according to specifications on file in above office and of Quartermaster, Fort Fremont, S. C. Blank forms of proposal, specifications, etc., can be obtained on application to either of offices named; J. W. Pipe, colonel and chief quartermaster.

Boilers.—Indiana Co-operative Canal Co., Box 107, Brownsville, Texas, wants prices on boilers.

Brick Machinery.—G. T. Traylor, Gabbettville, Ga., wants brick machinery.

Bridge Construction.—New Hanover and Pender counties, North Carolina, will open bids January 7 for construction of steel bridge, approximating 400 feet, including draw span over North East river at Castle Haynes, N. C.; bids to include foundations; depth of water about 32 feet; bridge to have 16-foot road clearance and to carry 15-ton road roller; design of bridge and details to be submitted by bidders; usual rights reserved. Bidders must take their own measurements and soundings. For further information address D. McEachern, chairman, Wilmington, N. C.

Building Construction.—Center Valley Railway, Light & Power Co., H. A. Williams, general manager, Rogge Hotel, Zanesville, Ohio, will soon want bids for constructing power-houses, etc.

Building Materials.—Electric Park Co., 4 Light street, Baltimore, Md., wants bids on building materials for construction of about 30 amusement buildings at Electric Park.

Building Materials.—See "Jail and Court-house Supplies."

Canning Machinery.—A. J. Patterson, Greenville, Tenn., is in market for new or second-hand canning machinery.

Cardboards.—T. J. Mitchell, Rustburg, Va., wants to correspond with manufacturers of cardboards for making paper friction wheels.

Car-wheel Borer.—See "Machine Tools."

Chair Machinery.—J. B. McGahey, Basic City, Va., is in market for chair-making machinery.

Chandeliers.—W. C. Allen, Latta, S. C., wants prices on chandeliers for \$7000 church.

Church Furniture.—W. C. Allen, Latta, S. C., wants prices on seating and pulpit stand for \$7000 church.

Condensed-milk Plant.—Edward L. Anderson, Board of Trade, Gallatin, Tenn., wants to correspond with manufacturers of machinery for condensed-milk plant.

Cooperage.—Brightwater White Lime Co., Brightwater, Ark., wants cooperage.

Cotton.—See "Cotton Felt."

Cotton Felt.—Harald Michelsen, Post Box 65, Christiania, Norway, wants to correspond with American manufacturers of cotton felt;

also wants to correspond with firms offering raw cotton.

Cotton Gln.—J. W. Harp, Reynolds, Ga., will want complete gin outfit.

Crushing Machinery.—See "Turpentine Machinery."

Drills.—Brightwater White Lime Co., Brightwater, Ark., wants rock drills.

Drill Press.—Ferrofix Brazing Co., Charlotte, N. C., is in market for drill press to drill to center of 30-inch circle; second-hand will answer.

Dynamos.—Geo. J. Adams, 39 South street, corner Old Slip, New York, N. Y., in market for two dynamos, 50-kilowatt, 125-volt, direct-connected. (See "Engines.")

Electric Conduits and Wiring.—See item under "Courthouses," Ocala, Fla.

Electric Plant.—Lester Clay Co., Jacksonville, Fla., wants electric-lighting plant; 75 to 100 lights.

Electrical Equipment.—Electric Park Co., 4 Light street, Baltimore, Md., wants bids on electrical equipment for about 30 amusement buildings to be erected at Electric Park.

Electrical Machinery.—Center Valley Railway, Light & Power Co., H. A. Williams, general manager, Rogge Hotel, Zanesville, Ohio, will soon want bids for furnishing electrical equipment for power-house.

Engine.—H. C. Andrews, Dewitt, Ark., wants engine for pump on rice lands; pump forcing 4 to 10-inch stream.

Engines.—Indiana Co-operative Canal Co., Box 107, Brownsville, Texas, wants prices on engines.

Engines.—See "Gasoline Engines."

Engines.—Geo. J. Adams, 39 South street, corner Old Slip, New York, N. Y., in market for two direct-connected engines for dynamos of 50 kilowatts and 125 volts.

Engine Lathe.—Ferrofix Brazing Co., Charlotte, N. C., in market for engine lathe; swing 20 to 24 inches, 8 or 10 feet between centers; second-hand will answer.

Excelsior Machinery.—G. T. Traylor, Gabbettville, Ga., wants excelsior machinery.

Files.—Harald Michelsen, Post Box 65, Christiania, Norway, wants to correspond with American manufacturers of files.

Gasoline Engines.—S. E. Horne, Burkittsville, Md., wants catalogues and other literature issued by manufacturers of gasoline engines.

Glazed Sash.—Galax Furniture & Lumber Co., Galax, Va., wants nine-light sash, glazed, 10x12.

Handles.—W. H. Zachry, 77 Glenn street, Atlanta, Ga., wants prices on mop handles by carload f. o. b. Atlanta.

Hardware.—Kramer Bros. & Co., Elizabeth City, N. C., want catalogues and prices on builders' hardware.

Heating Apparatus.—See item under "Courthouses," Ocala, Fla.

Heating Plant.—D. P. Airheart, Runge, Texas, wants bids on heating plant for \$6000 church.

Holsting Engine.—R. L. Beasley Steam Stump Puller Co., Gordon, Ala., wants 15-horse-power double-cylinder single-drum holsting engine, on frame, to resist pressure of 125,000 pounds.

Ice-cream Machinery.—Purity Ice Co., Sandersville, Ga., wants complete outfit ice-cream machinery.

Ice Plant.—J. E. Norman, 409 Effingham street, Portsmouth, Va., wants to buy second-hand five or six-ton ice plant.

Ironworking Machinery.—See "Machine Tools."

Jail and Courthouse Supplies.—City of Bristol, Va., will be in market for machinery and supplies for jail and courthouse to be erected; clerk, John H. Gose.

Knife-grinder.—Ferrofix Company, Charlotte, N. C., wants automatic knife-grinder; second-hand will answer.

Laundry Machinery.—Morris Levy, manager Sanitary Family Laundry, Petersburg, Va., wants laundry equipment.

Lighting Fixtures.—D. P. Airheart, Runge, Texas, wants bids on lighting fixtures for \$6000 church.

Lighting Fixtures.—J. S. Costley, Meadville, Miss., wants prices on lighting fixtures.

Locomotive Tires.—J. B. McGahey, Basic City, Va., in market for 20-inch locomotive tires.

Lumber.—Galax Furniture & Lumber Co., Galax, Va., wants cheap pine lumber boards, flooring and siding.

Machine Tools.—G. F. M., care of Manufacturers' Record, wants No. 2 axle lathe, 36-inch car-wheel boring mill; 28-inch by 16-

foot turning lathe, plain-thread gear; 16-inch by 10-inch turning lathe, quick-change thread gear; 72-inch boring mill, two heads; 4-foot radial drill, plain; 20-inch light plain drill press; bolt cutter, ½-inch to 2-inch, quick opening head; power punch and shear, 1¼ hole in 1¼ metal. Prices and description wanted on both new and second-hand tools in good condition.

Machine Tools.—See "Engine Lathe," "Drill Press" and "Shaper."

Mantels.—Kramer Bros. & Co., Elizabeth City, N. C., want catalogues and prices on hardwood mantels.

Manufacturers.—L. Delery, 50 Rue Sainte, Marseilles, France, is prepared to correspond with American manufacturers relative to representing them in France.

Marble Work.—W. C. Allen, Latta, S. C., wants prices on marble rim for baptistry.

Metal Ceiling.—D. P. Airheart, Runge, Texas, wants bids on metal ceiling for \$6000 church.

Miscellaneous Equipment, etc.—Bids will be received at office of H. F. Hodges, General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until December 6 for furnishing pumps, engine lathe, pneumatic tools, hose, steel plates, iron pipes and fittings, valves, etc. General information relating to Circular No. 402 obtained from above office or office of assistant purchasing agents, 24 State street, New York; Custom-house, New Orleans; 1086 North Point street, San Francisco, Cal.; and 410 Chamber of Commerce Building, Tacoma, Wash.; also from Chief Quartermaster, Chicago; Depot Quartermaster, St. Louis; Depot Quartermaster, Jeffersonville, Ind.; and Chief Quartermaster, Atlanta, Ga., and at U. S. Engineer Office in following cities: Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit and Milwaukee.

Paper Fiber.—See "Cardboards."

Paving.—Board of Improvement of Side-walk District No. 1, Clarksville, Ark., will open bids November 15 at office of Sam Laser, chairman, for furnishing labor and materials, tools and plant for construction of 7544 feet of sidewalk three feet in width, 3365 feet four feet wide, and 647 feet of crossing three feet wide, all of concrete; plans and specifications on file with Mr. Laser.

Pipe.—W. P. Johnson, clerk, Claremore, I. T., wants price on eight-inch cast-iron pipe for city water system.

Piping.—R. L. Beasley Steam Stump Puller Co., Gordon, Ala., wants price on well casing two to six inches diameter.

Plumbing.—See item under "Courthouses," Ocala, Fla.

Power-house.—See "Building Construction."

Power Punch and Shear.—See "Machine Tools."

Pump.—H. C. Andrews, Dewitt, Ark., wants pump with 4 to 10-inch stream capacity for irrigation purposes.

Pumping Machinery.—W. P. Johnson, Clerk, Claremore, I. T., wants prices on pumping machinery for city water-works.

Pumps.—Indiana Co-operative Canal Co., Box 107, Brownsville, Texas, wants prices on centrifugal pumps, erected.

Pumps and Piping.—Sharon Tobacco Co., Quincy, Fla., wants pumps and piping for irrigating.

Railway Construction.—Center Valley Railway, Light & Power Co., H. A. Williams, general manager, Rogge Hotel, Zanesville, Ohio, will soon want bids for constructing electric railway 74 miles long.

Roofing.—J. W. Harp, Reynolds, Ga., will want roofing for cotton gin.

Sawmill.—McKee & Ferguson, Kansas City, Mo., want prices on sawmill outfit of about 50 horse-power. Address at present, Cherry Valley, Ark.

Sawmill.—No. 220, care Manufacturers' Record, Baltimore, Md., wants second-hand band-saw mill, capacity 35,000 feet per day, immediate delivery.

Saws.—Harald Michelsen, Post Box 65, Christiania, Norway, wants to correspond with American manufacturers of saws.

Saws.—See "Woodworking Machinery."

Saws.—Ferrofix Brazing Co., Charlotte, N. C., in market for 36-inch band saw; also for combination rip and cut-off saw frame; also for automatic knife-grinder. Second-hand tools will answer.

Shaper.—Ferrofix Brazing Co., Charlotte, N. C., in market for 24-inch shaper. Second-hand will answer.

Showcases.—J. S. Costley, Meadville, Miss., wants prices on showcases.

Skewer Machinery.—Gibbs Machinery Co.,

804 West Gervais street, Columbia, S. C., wants to correspond with makers of machinery for manufacturing meat skewers.

Slate Roof.—W. C. Allen, Latta, S. C., wants prices on slate roof for \$7000 church.

Steel Castings.—R. L. Beasley, Steam Stump Puller Co., Gordon, Ala., wants open-hearth steel castings.

Strawboard Machinery.—J. B. Peters, general manager, Board of Trade, Bristol, Tenn., Va., wants to correspond with manufacturers of strawboard egg-filler machine.

Turpentine Machinery.—R. L. Beasley Steam Stump Puller Co., Gordon, Ala., wants prices on "hog" with planers for extracting turpentine from stumps and stumps.

Water Meters and Boxes.—Board of Control, Norfolk, Va., will receive bids for furnishing and installing about 2000 ½-inch and ¾-inch water meters and meter boxes in accordance with specifications; also for installing about 2000 ½-inch and ¾-inch water meters and boxes in accordance with specifications; also for furnishing about 2000 ½-inch and ¾-inch water meters in accordance with specifications; also for furnishing about 2000 meter boxes in accordance with specifications; above contracts to be awarded November 18. Specifications, forms of proposal and necessary information may be obtained from office of Board of Control. Board reserves right to consider other forms

of tender than those specified, provided they are fully noted and cover requirements of Board and are accompanied by certified check for amount named in specifications in each instance; H. Hodges, chairman; R. Henry Jones and Robert Johnston, Board of Control.

Well Drills.—R. L. Beasley Steam Stump Puller Co., Gordon, Ala., wants prices on deep-well drills.

Wire Cable.—T. J. Mitchell, Rustburg, Va., wants to buy wire cable for sawmill feed.

Woodworking Machinery.—See "Chair Machinery."

Woodworking Machinery.—Voussis Lumber Co., Oak Hill, Fla., wants new or second-hand three-saw gang edger and small pony planer.

Woodworking Machinery.—Ransel Johnson, Clarksburg, W. Va., wants new or second-hand four-side machine, double surfacer and other small machines.

Woodworking Machinery.—See "Skewer Machinery."

Woodworking Machinery.—Ransel Johnson, Clarksburg, W. Va., is in market for four-side planer, medium weight; self-feed rip saw, circular; band resaw and universal woodworker; would use second-hand if guaranteed in good working order.

Woodworking Machinery.—See "Excelsior Machinery."

INDUSTRIAL NEWS OF INTEREST

Mr. E. G. Herndon.

Mr. E. G. Herndon of the Dodge Cold-Storage Co. of Philadelphia, Pa., has been appointed the company's resident engineer at Chicago.

Gold Medal for Pittsburg Vises.

The Pittsburg Automatic Vise & Tool Co. of Pittsburg, Pa., has been advised by the jury of awards of the Jamestown Exposition that it has been awarded the gold medal for vises, the highest honor obtainable. The award was not only given upon each style vise manufactured by this company, but upon the entire line.

Gold Medal for Belting Superiority.

A telegraphic communication from the officials of the Jamestown Exposition to Messrs. Chas. A. Schieren & Co. of New York informs that firm that it has been awarded the gold medal for the superiority of its Duxbak waterproof and Duxbak steam-proof leather belting. The Schieren exhibit has been one of the features of the exposition.

The Holmboe Company Engaged.

Among the many Southern cities of the smaller class now arranging for the construction of water-works and sewer systems and electric-light plants is Smithfield, N. C. It is interesting to note that the city's officials have engaged the Holmboe Company, Lincoln Savings Bank Building, Louisville, Ky., to prepare plans and specifications for the three plants.

Long Island Machinery Co.

Buyers of machinery are invited to consider the quotations of the Long Island Machinery Co. before they place their orders. The company deals in various kinds of machinery, tools and supplies, and is at present offering at bargain prices an S. A. Woods planer and matcher and a gas-engine lathe. Address the company at 7 Washington avenue, Brooklyn, N. Y.

Demand for Powhatan Brick.

The Powhatan Clay Manufacturing Co., manufacturer of face brick, reports the demand for its product about as good this fall as last, notwithstanding the tightness of the money market. The company is making shipments now for two large courthouses, one in Blahopville, S. C., for which salt and pepper gray brick is being used, and the other in Lumberton, N. C., which calls for silver-gray brick.

Kramer Bros. & Co.

Messrs. Kramer Bros. & Co. (Incorporated) of Elizabeth City, N. C., have about completed their two-story 32x160-foot building in which to give attention to glazing and to store sash, doors, blinds, doors and other building materials manufactured by the company. It is the intention to add departments for builders' hardware, hardwood, mantels, etc., and catalogues with prices on these new products are wanted.

Mr. Walter Howard Crawford.

Mr. Walter Howard Crawford, mining engineer, 407½ Church street, Nashville, Tenn.,

returned to Nashville on October 1. Between that date and June 4 he had traveled 15,000 miles and was in 18 States on the trip. While away he bought a copper mine four miles from Bisbee, Ariz., for a syndicate that elected him vice-president and consulting engineer of the \$2,000,000 company, which will develop the property.

Presses and Dies for Foreign Lands.

The Ferracute Machine Co. of Bridgeton, N. J., manufacturer of presses and dies for sheet-metal work, made shipment of its presses last week to India, Austria, France and England, besides several carloads of large presses to manufacturers of electrical goods in this country. The company's new shops are provided with electric cranes and installed with the most approved modern machinery, placing it in a position to handle large orders.

Mr. Kehew With Pittsburg Automatic Vise & Tool Co.

Mr. Kehew, auditor of the Crucible Steel Co. of America has resigned from that company to accept the secretary-treasurership of the Pittsburg Automatic Vise & Tool Co., manufacturer of the Pittsburg double and single-swivel vise. Mr. Kehew has devoted his entire life to the minute study of costs, system and finance in general, and is considered an important addition to the already strong executive force of the Pittsburg Company.

Has Engaged S. T. De La Mater.

The General Fireproofing Co. has engaged the services of S. T. De La Mater, and he is located for the present at the home offices, Youngstown, Ohio. Mr. De La Mater was formerly with the Standard Construction Co. of Chicago, the Osborne Engineering Co. of Cleveland, Ohio; the L. P. & J. A. Smith Company, also of Cleveland, and Paul F. P. Mueller and Faleanu Construction Co. of Chicago. His connection with these companies has given him the opportunity to acquire a wide experience in reinforced-concrete construction. Mr. De La Mater graduated from Cornell University in 1900.

Florida State Midwinter Fair Association.

The Florida State Midwinter Fair Association will hold the annual State Fair at Tampa, Fla., February 5 to 22. This is the season when the State has many visitors from all parts of the United States. Florida people are interested in new agricultural machinery, the latest type of irrigating plants, of building and other machinery. The association offers a reasonable amount of space free of cost. Early application will be necessary. For information address Thomas J. L. Brown, president of the association.

Death of Richard D. Hurley.

It is with great regret that the Independent Pneumatic Tool Co. of Chicago, Ill., has announced the death of Richard D. Hurley, manager of its Pittsburg offices. During his 10 years' connection with the pneumatic tool business he became widely acquainted in the Pittsburg, New York and Chicago

districts, and his friends and business associates find a distinct shock in his death. Mr. Hurley was a brother of John D. Hurley, vice-president and general manager of the company, and Edward N. Hurley, organizer and former president of the Standard Pneumatic Co.

Center Valley Railway, Light & Power Co.

Industrial developments are not being overlooked in Ohio, and new projects are steadily being announced for that State. One of the new enterprises is the Center Valley Railway, Light & Power Co., H. A. Williams, general manager, Rogge Hotel, Zanesville, Ohio. This company is to develop lands and locate manufacturing plants at a point nine miles south of Zanesville. It is building a large electric plant to furnish light, heat and power, also is constructing an electric railway 74 miles long. Bids for the building, equipment of power plant and construction of railway will be wanted soon.

For Concrete and Structural Engineering.

Announcement is made by Percival Robert Moses, 329-332 Fifth avenue, New York, that he has established a department of structural and concrete engineering. This department is under the direction of H. C. Hutchins, formerly of the American Bridge Co. and Trussed Concrete Steel Co. Mr. Moses is now prepared to undertake engineering under the following classifications: Steam plants, electric plants, refrigerating plants, steel construction, elevators, plumbing and water supply, heating and ventilating, reinforced concrete construction, foundations, advisory engineering on plant operation and appraisals of existing plants.

Inviting Inquiries for Power.

The Rockingham Power Co. states that rapid progress has been made on its large concrete dam across the Yadkin river at Blewett's Falls. According to the engineers' estimate, 28,800 electrical horse-power will be available for delivery at various points in North and South Carolina in the early summer of 1908. The section to be reached by this transmission line has many natural advantages, which make it an attractive field for the development of manufacturing industries to be driven by electrical power. Inquiries are invited for power or for factory locations. Address C. E. Warner, contract agent of the company, Rockingham, N. C.

Increasing Demand for Bruner Wagons.

There is such an increasing demand for the Bruner wagons that the manufacturer finds it necessary to increase capital in order to give proper attention to the contracts constantly being received. The capital has been \$50,000, and it is now \$100,000, this announcement having been made recently by the Bruner Steel Wagon Co., established at Wapakoneta, Ohio. The Bruner steel wagons are built for general purposes—farming, trucking, logging, etc. They are made of high-grade cold-pressed steel and have become well known throughout the entire country. The company issues a leaflet giving some interesting facts regarding its methods.

General Fire Extinguisher Plant.

Protection of buildings, especially manufacturing plants, from fire damage is a question which is given much attention. The demand for automatic fire-extinguishing apparatus in the South is large and constantly increasing, and this has resulted in the General Fire Extinguisher Co. of Providence, R. I., providing extensive branch facilities at Charlotte, N. C. The company has just completed the plant it has been building there. It has two buildings, 200x300 and 50x100, the first being a warehouse and the second being a machine shop. This establishment will enable the company to give the best possible attention to its installations of sprinkler systems in North and South Carolina, Virginia and Tennessee, which States have been removed to the new plant, but the South College street building will continue to be used as a warehouse.

Erecting a Building at Tidewater.

A recent contract awarded Frank B. Gilbreth of New York is for a can factory for the Seacoast Canning Co. at Eastport, Maine. The architect and engineer is Chas. T. Main of Boston, Mass. The structure is to be two stories high, 120x130 feet; first floor of reinforced concrete designed for a live load of from 200 to 300 pounds; second story and roof of slow-burning type of mill construction. Brick curtain walls will enclose the building; interior partitions of reinforced concrete; stairways and trimmings

of fireproofed wood. The site is at tide-water, where at high tide water will surround it on three sides. Since the rise and fall of the tide at times gives a variance of 20 feet, the construction will present problems of more than ordinary interest. To insure security massive foundations of granite, averaging 25 feet in height, will be placed beneath the structure proper.

Jamestown Exposition Awards.

James L. Farmer, secretary of the jury of awards, Jamestown Exposition, has notified the General Electric Co. of Schenectady, N. Y., that it has been awarded two gold medals and a bronze medal for its exhibit at the exposition. The classification by which the jury was governed in granting the awards limited them to one in each department, while previous expositions have allowed separate awards for each class of material exhibited. The General Electric Co.'s exhibits are grouped in three departments—the machinery, the manufactures and liberal arts, and mining departments. A collection of motors applied to various machine tools and other devices has been awarded a gold medal. The arc and incandescent lamps and electric cooking applications exhibited in the departments of manufactures and liberal arts are also awarded a gold medal. The company exhibited a special motor designed particularly for use with an ingersoll-Temple pneumatic rock drill, and this motor, because of its peculiar adaptation to the special service, was awarded a bronze medal. The company was also awarded a silver medal for installation of exhibit.

First Annual Cement Show.

The first annual Cement Show will be held in Chicago at the Coliseum, December 17 to 21. This exposition is under the auspices of the Cement Products Exhibition Co., incorporated for the purpose of holding annual expositions of cement products. The enterprise is being promoted by Portland-cement manufacturing interests of the Middle West, and is being actively supported by the leading periodicals devoted to the industry as stockholders in the company. It is hoped that the exposition will be of great educational importance and will accomplish a good work in advancing the interests of the industry. The scope of the exposition may be judged from the outline of the various divisions of exhibits, as follows: Cement, concrete mixers, block machines, brick machines, cement-pipe machines, cement-tile machines, cement-post machines, cement coloring mixtures, reinforcing metal, cement publications, testing machinery, sheet piling, aggregates, sand, technical institutions, etc. The management has been placed with L. L. Fest, an experienced manager of trade exhibitions of this nature. His offices are in the New Southern Hotel, Michigan avenue and 13th street, Chicago.

E. J. Johnson Roofing Slate.

There is a big demand for roofing slate, and the manufacturers of the best qualities are obtaining many and large orders. Prominent among the roofing-slate producers is the E. J. Johnson Company of 38 Park Row, New York. This company has quarries in Pennsylvania and Vermont, and has been in the slate business for more than 24 years past, its production including green, blue and purple roofing slates, as well as slate blackboards. Its method is to produce a high standard of roofing slate, making no attempt to compete with the cheaper slates. In addition to the standard No. 1 grades it is making a specialty of roofing slates "out of the ordinary," and has furnished these to many prominent buildings through well-known architects. The company's facilities for producing these special slates are of the best, and it is prepared to quote prices on all grades of roofing slates delivered at any point in the country. The E. J. Johnson slate blackboard production is claimed to be the largest in the country, as well as the highest grade. These blackboards are being supplied to schoolhouses in every State of the Union. An interesting booklet regarding them has been issued. It is of interest to add that the E. J. Johnson Company is supplying the slate used in erecting the Singer Building in New York. This structure, to be the largest in the world, will be 641 feet high, 41 stories.

Selling Metal Work in Southwest.

There is a large and growing territory for various manufactured products in the territory tributary to Kansas City, Mo. Progressive managers are aware of this and are actively seeking to meet the demand in the section referred to. Among the companies meeting with success in this direction is the J. A. Ritzler Cornice & Ornament Co. of Kansas City. This company's secretary, J. E. Rhoads, says: "Within the past year we

have manufactured metal work for new union depot, Little Rock, Ark.; metal windows for Century Building, Pittsburg, Kan.; metal windows for addition to Lincoln Hotel, Lincoln, Neb.; metal windows for wood-treating plant built by A. T. & S. Railway at Albuquerque, N.M.; metal windows for Modern Order of Praetorians, 15-story office building, Dallas, Texas; \$10,000 worth of fireproof windows, fireproof doors and fireproof elevator enclosures for Continental Bank & Trust Building, Shreveport, La.; metal windows for Busby Building, Tilson Building, Allen Building and Shreveport Traction Co.'s new barn, a total of \$25,000 worth in Shreveport; several carloads of metal windows for Iowa Portland Cement Co. plant near Dallas, Texas." The J. A. Ritzler Cornice & Ornament Co. has closed a \$60,000 contract to furnish sheet-metal work on Fort Sam Houston, Texas; also to furnish two carloads of metal windows for Union Trust & Realty Co. building at Texarkana, Texas. These contracts show the vast possibilities of Kansas City as a manufacturing and distributing center for building material.

Water Purification in Textile Industry.

Among the noteworthy features of the textile industry during recent months has been the decided interest taken in water purification, and particularly that branch of the art included under the general head of filtration. The demands of the consumers of textiles have recently become so exacting in relation to the color and other characteristics of fabrics that a thorough appreciation of the benefits of pure water has been awakened in the textile trade. Messrs. Hungerford & Terry, filtration engineers, 1412 Pennsylvania Building, Philadelphia, Pa., report recent awards to them of contracts for filters constructed on the Hungerford system of filtration aggregating 9,000,000 gallons per day. Among the most important of these are a 5,000,000-gallon plant for Weidmann Silk Dyeing Co., Paterson, N. J.; 1,000,000-gallon plant for Belman Brook Bleachery Co., Fairview, N. J.; 300,000-gallon plant for Firth & Foster, Philadelphia, Pa.; 400,000-gallon plant for Passaic (N. J.) Print Works; 400,000-gallon plant for North Adams (Mass.) Manufacturing Co.; 300,000-gallon plant for Andrew McLean Company, Passaic, N. J.; 200,000-gallon plant for E. R. Melnic & Co., Reading, Pa., and 150,000-gallon plant for Melville Woolen Co., Fredericksburg, Va. In other lines Messrs. Hungerford & Terry report for the Southern States a 1,700,000-gallon plant for Bedford Pulp & Paper Co. at Colemans Falls, Va.; 600,000-gallon plant for Delaware Hard Fiber Co., Marshallton, Del., and 100,000-gallon filter for swimming pool of Y. M. C. A. building, Wilmington, Del. The firm is also bidding on a number of proposed filter plants in Southern textile mills.

TRADE LITERATURE.

A Merry War Ended.

A certain merry war ended recently, and a brief history concerning the disagreement and how it was settled has been presented in a leaflet aptly entitled "A Merry War and How It Ended." It is shown therein just how monarch of eventide beat the prince of darkness, which defeat was contributed to, by the way, by the use of Monarch incandescent electric lamps. The Monarch Electric Manufacturing Co. of Warren, Ohio, is distributing the leaflet on the late war.

Modern Forgings.

"Forgings" is the title of an illustrated pamphlet which is of timely interest. It is intended to give an idea of the class of work its publisher is prepared to undertake rather than to serve as a catalogue of products. The references include drop forgings, steam-hammer forgings, finished crankshafts, automobile tools, chisel tools, etc. The Anderson Forge & Machine Co. of Detroit, Mich., is the manufacturer of the forgings listed, and is prepared to send copy of the booklet to applicants.

Alundum—Its Invention and Use.

An unusual advance in mechanical lines during recent years has been that of the development of grinding. The field of the old grindstone was limited, and the sharpening of edge tools was almost its only use. But the introduction of the emery wheel made grinding an important operation. Then later came the artificial abrasive for grinding wheels. The Norton Company of Worcester, Mass., has been a pioneer in this direction, and is now distributing an interesting booklet telling all about its invention and the uses of alundum. The requisites attained in this abrasive are extreme hardness and sharpness combined with uniformity and proper temper. These qualities in alundum

have had much to do with its successful development. The Norton booklet gives a complete description of the manufacture of this abrasive, and is of interest to all who are concerned in abrasives. Send for a copy.

Stage-Lighting Specialties.

Because of the erection of theaters and other amusement enterprises in the South there is evidently a demand in that section for lighting specialties especially designed for such structures. This fact makes it pertinent to refer to the Chase-Shawmut Company of Newburyport, Mass., as a specialist in this direction. The company issues an illustrated leaflet giving brief references to its stage pockets and plugs, bunc lights, music light shades and other novelties. Investigation of these Chase specialties is invited.

Fort Wayne Electric Works.

Timely and interesting literature relative to arc lamps and calibrators is now being distributed by the Fort Wayne Electric Works of Fort Wayne, Ind. It includes the latest bulletins, Nos. 1097, 1098 and 1101, which, respectively, give data as to the company's portable wattmeter calibrators, enclosed-circuit current multiple arc lamps and multiple system of street arc lighting. These bulletins enable dealers in Fort Wayne electrical machinery and supplies and users of such products to keep informed of the latest improvements in equipment of this character.

"Daylighting."

A pamphlet entitled "Daylighting" has been issued in the interest of the American Luxfer Prism Co., main office Heyworth Building, Madison street and Wabash avenue, Chicago, Ill. The publication presents data and illustrations regarding the Luxfer products, which are manufactured by this company, and for which it claims proven merit, scientific construction and guaranteed service. These products include pressed tile prisms, prism canopies, pressed prism skylights, sheet prisms, floor prisms, plain sidewalk lights, sidewalk prisms and other devices used for lighting modern stores, mills, factories, etc.

American Grocers' Tinware.

The grocery trade is one which handles a variety of products and requires in its conduct numerous articles which manufacturers offer. Grocers' tinware is a class of manufactures in constant demand, and a timely publication is the illustrated catalogue of the American Can Co. of 447 West 14th street, Chicago, and San Francisco. This catalogue illustrates and describes briefly many standard and special cabinets for tea, coffee and spices, cans and caddies, scoops, tanks, canisters, boxes, etc. Besides making these, the company offers special lines of receptacles for the drug, paint, oil, butter, confectionery and other trades.

Craig Hot-Water and Steam Heaters.

With the approach of the winter months even more attention than usual is given to the subject of heating apparatus in all classes of buildings. Steam and hot-water equipments are the favorite methods of furnishing heat to modern buildings, and the various designs of the heaters should be familiar to architects, contractors and homeowners. The Craig hot-water and steam heaters and Koran radiators are described, the text being accompanied by illustrations. In current leaflets being distributed by the Williamsport Radiator Co. of Williamsport, Pa. Interested parties are invited to send names and addresses for copies.

Standard and Extra Heavy Flanged Fittings.

Standard screw flanges, blank flanges, flanged 90-degree elbows, flanged 45-degree elbows, flanged tees, reducing flanged tees, flanged crosses, extra heavy flanges and elbows, etc., are listed and illustrated in a pamphlet now being distributed. For a number of years fittings similar to those described have been made by the Direct Separator Co. of Syracuse, N. Y. The company uses strong, close-grained iron, and takes the utmost care in machining. It has ample facilities, and solicits inquiries for standard forms and for special forms not listed. Fittings of semi-steel can be supplied if purchasers wish.

Drills—The Cyclone Line.

The Cyclone line of drills is dealt with in a pocket-size pamphlet now being distributed. These drills are of various kinds—for well-drilling, prospecting, sounding, boring, blast holes, loaders, etc. Those illustrated are the principal ones, showing but one size of the different types, many of which are made in a number of sizes and

styles. The Cyclone Drill Co. of Orrville, Ohio, is the manufacturer of these drills, special catalogues of the different classes being issued. These include general catalogue, core catalogue, contractors' catalogue, a monthly publication called "The Drill Hole" and booklets entitled "The Economy Blast-Loading System," "Does Well Pay?" "Size vs. Cost Blast-Hole Drilling," and others.

Bird's Bull's-Eye Belting.

Discriminating buyers of belting need to be convinced of the superiority of the brand they purchase. They find it is time and money wasted to experiment with untried belting and therefore seek to contract for the kind which the manufacturer offers with strong testimony of other users and with actual demonstration. This is the method by which Messrs. J. A. & W. Bird & Co. of Boston, Mass., endeavor to convince people of the value of their Bird's Bull's-Eye Belting. Pertinent facts and figures regarding this belting are being presented in an interesting illustrated pamphlet which the firm is now distributing. Managers of plants wherein belting is required will find they are serving their interests by considering the data presented in the Bird pamphlet.

Practical Books for Industrial Workers.

Industrial workers, engineers, managers of manufacturing plants and others frequently have need to refer to practical books for information, and those who are learning various trades and technical professions must have such information in order to perfect their knowledge in any chosen avenue of industrial activity. Those who are interested in practical books will find them listed in the Henley catalogue now being distributed. This catalogue mentions publications on receipts, formulas and processes; dies, their construction and use; hardening and tempering of steel; interchangeable manufacturing; punches, dies and tools; American toolmaking; Henley's Engineering Encyclopedia; woodworking tools; practical lettering and spacing; mechanical movements; steam engineering; patternmaking; metalturning; electric wiring; watchmaking; lathe practice; Waischaert valve gear; shop practice; modern plumbing; gas engine; mining, etc. These books are published by the Norman W. Henley Publishing Co., 132 Nassau street, New York.

Economical Composition for Pipe Joints.

"Leadite, as its name would imply, is a substitute for lead composed of mineral ingredients, and it makes a strong, enduring joint on water mains, soilpipes and sewer pipes, etc. Leadite weighs 118 pounds per cubic foot when melted in block form. Lead weighs 708 pounds per cubic foot, just six times as much, so that one ton of leadite will do as much work as four tons of lead. Leadite is melted and poured into the joint in the same manner as lead, but no caulking is required, as the leadite takes a giant grip on the pipe and will, if the joints are properly made, never blow out under any pressure; and as no caulking is required it will not be necessary to dig large bell-holes. Another great advantage of leadite over lead, besides the saving in cost of material and labor, is that the older a leadite joint is the more pressure it will stand." The foregoing concisely outlines the properties of leadite, which is manufactured by the Leadite Company of America, Heed Building, 1215 Filbert street, Philadelphia, Pa. This company is issuing an illustrated pamphlet giving full particulars of its product. The above quotation is from the pamphlet.

GROWTH OF FORT SMITH.

Industries Being Established in the Arkansas City.

[Special Cor. Manufacturers' Record.]
Fort Smith, Ark., November 7.

One of the most marvelous records of industrial development is Fort Smith. Located in the western part of this growing Commonwealth, and on the eastern border of the new State of Oklahoma, nestling, as it were, in the center of the most fertile and resourceful land areas, the growth of Fort Smith is worthy of serious consideration by manufacturing and jobbing capital, particularly that bent upon getting in closer touch with raw materials and a large and expansive market. Four large plants have been located in this city during the past seven months, which will employ several hundred men.

They are the Southwestern Chair Co., the Fort Smith Handle Co., Burke Bros. Brick Co. and American Veneer Co. Recent public improvements include a six-story bank and office structure, buff pressed brick and stone, costing \$300,000; a five-story hotel, to be known as "The Sebastian," costing \$350,000 and under \$100,000 cash bond to be ready for occupancy by June 1, 1908; the magnificent terminal station of the Kansas City Southern Railway Co., involving a cost alone of \$250,000; a \$50,000 ward school building now under contract to be ready for occupancy by September 1, 1908, and the Kennedy office building, four stories, pressed brick and stone. Aside from these marked improvements there have been 27 new business rooms built, all of which are under contract for occupancy. The building record for private structures will be the largest in the history of Fort Smith.

Mr. Paul B. Bigger, the indefatigable and capable secretary of the Commercial Club, says: "There are abundant reasons why Fort Smith is enjoying a healthy and steady growth, one of which will not disappear with the appearance of a financial blight. Fort Smith is a veritable storehouse of cheap fuel. That, with the largest and most promising natural-gas field, covering some 40 square miles of territory, tested and in use, supported by one of the largest but only partially developed semi-anthracite and bituminous coal fields to be found on the North American Continent, contiguous to one-tenth the available supply of hard and soft timbers in the Union, according to the United States Geological reports, is a great card for Fort Smith. Then we are surrounded by innumerable varieties of clays and shales of high qualities, iron ores testing from 45 to 60 per cent. metallic ore, seven railroads and two navigable rivers, limestones of almost pure quality, silica sands testing 95 to 99 per cent. pure, four States which are rapidly colonizing at the city's back doors. Thus it will be readily seen that Fort Smith presents a dazzling array of resources for development which cannot be disputed."

The strategic location of Fort Smith should be fully appreciated by capital seeking investments in the Southwest. Oklahoma, embracing Oklahoma and Indian Territories, has its eastern States lines to the city of Fort Smith. Because of the Statehood of that great Commonwealth there are today exceptional opportunities offered manufacturing lines which will never again be presented to the American industrial public. There have been 47 new counties created in that State, and in each of these will be built a courthouse, jails, infirmaries and other county buildings. These do not include the new city buildings which will also be needed. Each of these buildings will have to be equipped with office fixtures, etc. New county and town school buildings will of necessity be erected. A big State penitentiary, insane asylums, normal school buildings, agricultural school buildings, university, State capitol and other necessary structures will perforce be erected. This is one phase of the development planned here. In each of these counties, and, for that matter, all of the counties in the State, there will have to be public roads constructed. Thousands of miles of roads and hundreds of bridges are to be built, this section of the country being one of the most thoroughly drained countries in the Southwest. In over 40 of these counties there are no bridges except those owned by the railroads. With these extensive operations, which naturally must follow in the building of a new State, Fort Smith will become the center of our industrial activity greater than she has ever witnessed in her history. What New York was to Europe, what Chicago and St. Louis are to the great Western empire,

so will Fort Smith be to this vast empire, which covers millions of acres and which will soon become a great center of this country's industrial and commercial workshop.

There is now in contemplation by men of ample means the establishment of rapid automobile service in Sebastian county which shall be in the nature of an inter-urban line with hourly service connecting Greenwood, Jenny Lind, Excelsior, Huntington, Mansfield, Hartford, Montreal, Midland, Hackett and Bonanza with the south side of Fort Smith. The line would be a loop of about 70 miles in length, and would be operated at popular rates of fare. The main object of the promoters is to build a city to be known as South Fort Smith, establish factories, parks, playgrounds and a fine residence district.

Showing the wonderful advantages the surrounding country of Fort Smith offers the farmer and truck gardener, President Robertson of the Commercial Club says:

"Within a radius of 25 miles of Fort Smith there were raised and marketed this year the following crops: Strawberries, \$600,000; potatoes, \$800,000; peaches, \$70,000, and canteloupes, \$500,000. This is an evidence of what the farmer can do outside of his cotton crop and by diversifying, have a plenty of surplus cash as well as by having a good crop of cotton which will probably net him from 8 to 11 cents per pound."

In Little River county, Arkansas, there is one of the greatest deposits of chalk to be found in this country. It seems that the geological surveys of Arkansas have been very limited. The Arkansas Legislatures have not deemed the subject of sufficient importance to have all the reports published, even after the Federal Government has borne the principal cost of the surveys. This explains, in part, why the wonderful and unparalleled resources of Arkansas are not developed, and, indeed, unheard of by the outside world. This explains why this chalk deposit lies unnoticed while America still imports its chalk from Europe. Says State Geologist Branner, in speaking of this:

"The rock of this formation is a massive, nearly pure, white chalk, usually free from grit and easily carved with a pocket knife." Says Professor Hill on the same subject: "The thickness of the chalk at Rocky Comfort is over 500 feet, 100 feet of which can be seen at the surface, the remaining 400 feet having been penetrated by bored wells."

The area of this chalk exposed without covering about the village of Rocky Comfort is 900 acres. When it is considered that chalk is a very soft rock, and therefore does not require grinding, as do the compact limestones, and further, the greater ease with which it can be burnt into lime, its superiority over other limestones may be readily seen. The fact that this bed is the only one known to exist in the United States increases its value and opens the way for capital to exploit this great chalk bed.

The Ingle Wagon Manufacturing Co. of this city, starting 25 years ago as a little shanty, is today supplying the farmer a home-made product equal to the best made in the country. The Fort Smith Wagon Co., one of the best-equipped wagon factories in the Southwest, manufactures and sells over 7000 wagons annually.

W. A. Black, one of Fort Smith's progressive real-estate men, dealing in farm lands, fruit lands, mineral lands, coal, oil and gas lands, and for years a representative in the State Legislature, speaking of Fort Smith, says:

"We have a city which today challenges the admiration of this whole Western section, and as we are one of the few places

where the raw materials, transportation facilities, diversified crops and water-power exist in the greatest profusion, why should we not, therefore, look for capital to come here and unite in a harmonious development of a great and powerful city? I look for Fort Smith to double her population within the next decade, if not before."

There is evidence on all sides, in all lines of business and manufacturing, showing the steady growth of Fort Smith, and everyone seems to be giving a helping hand in this great development. It is a fact beyond dispute, given opportunity, the average American asks no odds. He is finding it in the Southwest, and putting the discovery to everyday practical use. With nothing but his hands and average energy he can get more out of the earth, can build his future better right here in the Southwest than almost anywhere else with the same natural advantages before him. The Southwest is growing, and growing faster than many realize. It has passed the swaddling stage, and its cities and towns are expanding, requiring more and better facilities, more industries, and, as a natural consequence, more capital, more workers, both in town and field. Peopled by an eager, progressive, wide-awake population of the best and most typical American stock, well enough is not satisfying—they are looking ahead and building for the future, and Fort Smith of today is the very exemplification of that American push and energy which is to be seen all over our common country of today.

ALEXANDER HELPER.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,

Baltimore, Md., November 13.

Prices in the Baltimore stock market during the past week have shown a tendency to improve, and while the gains were slight, the general tone is better.

In the trading United Railways common sold at 9; do. trust certificates, 9; the income bonds from 42½ to 43½, last sale at 43; the funding 5s from 67½ to 70; the 4s from 70½ to 81; Gas 6s, 101½ to 101½; do. 5s, 107½; Seaboard 4s, 63; G. B. S. incomes, 15 to 15½; do. 1sts, 40.

Mechanics' Bank stock sold at 26; Maryland Casualty at 57.

Other securities were dealt in as follows: Atlantic Coast Line stock, 62 to 67; Northern Central Railway stock, 79½ to 80½; Houston Oil common, 3¼ to 4½; Anacostia & Potomac 5s, 97; Atlanta Consolidated Street Railway 5s, 98½; Charleston & Western Carolina 5s, 99½ to 100; City & Suburban 5s, Baltimore, 106½; Georgia & Alabama Consolidated 5s, 98½ to 99; Georgia, Carolina & Northern 5s, 99; North Baltimore 5s, 107½; Western Maryland 4s, 64½ to 64; Western Maryland stock, 5 to 4½; Atlantic Coast Line Consolidated 4s, 84½ to 84½; Carolina Central 4s, 82 to 82½; Baltimore City Passenger 5s, 99½; Lexington Railway 5s, 96; United Railways of Detroit 4½s, 82; Baltimore City 4s, 1926, W. L., 98; Georgia Southern & Florida 5s, 102; Wilmington, Columbia & Augusta 6s, 102½; Baltimore City 3½s, 1940, 91; Metropolitan (Washington) 5s, 106½; Norfolk & Western 4s, 90; Baltimore Traction 5s, 104½; Knoxville Traction 5s, 104½; West Virginia Central 6s, 101½; Central Railway (Baltimore) 5s, 104½; Augusta Railway & Electric 5s, 96½; Washington Terminal 3½s, 82½.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended November 13, 1907.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast of Conn. Int. 100	100	95	100
Georgia Sou. & Fla. 1st Pfd. 100	100	95	100
Norfolk Railway & Light 25	25	17 1/2	18
Seaboard Company Common 100	100	9	10
Seaboard Company 2d Pfd. 100	100	30	35
United Railways & Elec. Co. 50	50	8 1/2	9 1/4
Western Maryland 50	50	4 1/2	5

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank 100	100	33	35
Drovers & Mech. Natl. Bank 100	100	24 1/2	25
Maryland National Bank 100	100	17	18
Merchants' National Bank 100	100	117	118
National Bank of Baltimore 100	100	117	118
National Exchange Bank 100	100	117	118
National Marine Bank 100	100	39	38
National Mechanics' Bank 100	100	19	20
National Union Bank of Md. 100	100	100	110
Third National Bank 100	100	110	122

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding Company 25	25	45	50
Maryland Casualty 25	25	55 1/2	60
Mercantile Trust & Deposit 50	50	121	122

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron Pfd. 100	100	70	75
Con. Cotton Duck Common 50	50	10	11
Consolidation Coal 100	100	76 1/2	85
G. B. S. Brewing Co. 100	100	2 1/2	4

Railroad Bonds.	Par.	Bid.	Asked.
Albany & Northern 50, 1946	50	93 1/2	95 1/2
Atlantic Coast Line 1st 50	50	82 1/2	84 1/2
Atlantic Coast Line (Conn.) 50	50	102	103
Carolina Central 40, 1949	40	82	83
Charleston & West. Car. 50, 1946	50	99 1/2	100
Char. Col. & Aug. 1st 50, 1910	50	99	102
Columbia & Greenville 1st 50, 1916	50	98 1/2	99 1/2
Georgia & Alabama 50, 1945	50	98 1/2	99 1/2
Georgia, Car. & North. 1st 50, 1929	50	99 1/2	101
Georgia Pacific 1st 50, 1922	50	106	108 1/2
Georgia Sou. & Fla. 1st 50, 1945	50	102	102 1/2
Petersburg, Class B 50, 1928	50	115	116
Piedmont & Cum. 1st 50, 1911	50	97 1/2	98
Potomac Valley 1st 50, 1941	50	105	106
Raleigh & Augusta 1st 50, 1926	50	105	112
Seaboard Air Line 40, 1950	40	62	63
Seaboard Air Line 50, 10-year, 1911	50	93	93
Seaboard & Roanoke 50, 1926	50	101	101
Silver Spgs., Ocala & Gulf 40, 1918	40	92	92
South Bound 50, 1941	50	97 1/2	98
Virginia Midland 2d 50, 1911	50	104	104
Virginia Midland G. M. 50	50	97 1/2	98
Western Maryland 40, 1952	40	63	64
Western Maryland 2d 40	40	50	50
Western North Car. Con. 60, 1914	60	101	102
West Virginia Cent. 1st 50, 1911	50	101 1/2	102
Wilmington, Col. & Aug. 60, 1910	60	102	102 1/2

Street Railway Bonds.	Par.	Bid.	Asked.
Annapolis & Potomac 50, 1949	50	97	97
Atlanta Con. Street Rwy. 50	50	98	98
Augusta Rwy. & Elec. 50, 1940	50	90	98
Baltimore City Pass. 50, 1911	50	99	99 1/2
Baltimore, Sp. Pt. & Ches. 40, 1928	40	87	87
Baltimore Traction 1st 50, 1929	50	105	106
Cent. Rwy. Con. 50 (Balt.), 1932	50	106	106
Cent. Rwy. Ext. 50 (Balt.), 1932	50	106 1/2	107 1/2
Charleston City Rwy. 50, 1939	50	99	102
Charleston Con. Elec. 50, 1939	50	90	90
City & Suburban 50 (Balt.), 1922	50	106 1/2	107
Knoxville Traction 1st 50, 1928	50	100	100
Lexington Railway 1st 50, 1949	50	98	98
Metropolitan 50 (Wash.), 1925	50	106 1/2	107
Newport News & Old Pt. 50, 1938	50	85	85
Norfolk Street Railway 50, 1944	50	99	102
North Baltimore 50, 1945	50	104 1/2	105
United Railways 1st 40, 1910	40	81	81
United Railways Inc. 40, 1949	40	43 1/2	43 1/2
United Railways Funding 50	50	69	70

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending November 11.

Bid.	Asked.
Abbeville Cotton Mills (S. C.)	85
Aiken Mfg. Co. (S. C.)	85
American Spinning Co. (S. C.)	120
Anderson Cotton Mills (S. C.)	74
Arkwright Mills (S. C.)	110
Augusta Factory (Ga.)	80
Avondale Mills (Ala.)	125
Belton Mills (S. C.)	115
Bibb Mfg. Co. (Ga.)	123 1/2
Brandon Mills (S. C.)	135
Cabarrus Cotton Mills (N. C.)	127
Chadwick Mfg. Co. (N. C.)	115
Chiquola Mfg. Co. (S. C.)	121
Clifton Mfg. Co. (S. C.)	115
Clifton Mfg. Co. (S. C.)	101
Clinton Cotton Mills (S. C.)	150
Columbus Mfg. Co. (Ga.)	95
Courtenay Mfg. Co. (S. C.)	97 1/2
Dallas Mfg. Co. (S. C.)	100
Darlington Mfg. Co. (S. C.)	90
Eagle & Phenix Mills (Ga.)	137 1/2
Easley Cotton Mills (S. C.)	145
Enoree Mfg. Co. (S. C.)	70
Enoree Mfg. Co. (S. C.)	100
Enterprise Mfg. Co. (Ga.)	90
Exposition Cotton Mills (Ga.)	225
Gaffney Mfg. Co. (S. C.)	85
Gainesville Cotton Mills (Ga.)	61 1/2
Granby Cot. Mills (S. C.) 1st Pfd.	47 1/2
Graniteville Mfg. Co. (S. C.)	160
Greenwood Cotton Mills (S. C.)	97
Grendel Mills (S. C.)	122 1/2
Henrietta Mills (N. C.)	161
King Mfg. Co. John P. (Ga.)	97
Lancaster Cotton Mills (S. C.)	91
Lancaster Cot. Mills (S. C.) Pfd.	91
Langley Mfg. Co. (S. C.)	100
Laurens Cotton Mills (S. C.)	150
Limestone Mills (S. C.)	140
Lockhart Mills (S. C.)	92 1/2
Lockhart Mills (S. C.) Pfd.	97
Louise Mills (N. C.)	91
Marlboro Cotton Mills (S. C.)	165
Mayo Mills (S. C.)	110
Mills Mfg. Co. (S. C.)	105
Mills Mfg. Co. (S. C.) Pfd.	105
Monaghan Mills (S. C.)	115
Monarch Cotton Mills (S. C.)	107
Newberry Cotton Mills (S. C.)	140
Norris Cotton Mills (S. C.)	121
Olympia Cot. Mills (S. C.) 1st Pfd.	68
Orangeburg Mfg. Co. (S. C.) Pfd.	90

Orr Cotton Mills (S. C.)	107
Pacolet Mfg. Co. (S. C.)	170
Pacolet Mfg. Co. (S. C.) Pfd.	103 1/2
Pelzer Mfg. Co. (S. C.)	165
Piedmont Mfg. Co. (S. C.)	165
Poe Mfg. Co. (S. C.)	128
Raleigh Cotton Mills (N. C.)	100
Richland Cot. Mills (S. C.) Pfd.	85
Roanoke Mills (N. C.)	140
Saxon Mills (S. C.)	125
Sibley Mfg. Co. (Ga.)	63
Spartan Mills (S. C.)	146
Springstein Mills (S. C.)	160
Trion Mfg. Co. (Ga.)	137 1/2
Tucapau Mills (S. C.)	200
Union-Buffalo Mills (S. C.) 1st Pfd.	67
Victor Mfg. Co. (S. C.)	131 1/2
Warren Mfg. Co. (S. C.)	92
Washington Mills (Va.)	25
Washington Mills (Va.) Pfd.	100
Whitney Mfg. Co. (S. C.)	150
Wilkesville Mills (N. C.)	125
Woodruff Cotton Mills (S. C.)	130
Woodside Cotton Mills (S. C.)	110 1/2

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending November 11.

Bid.	Asked.
Abbeville Cotton Mills (S. C.)	85
Aetna Cotton Mills (S. C.) Pfd.	75
Aiken Mfg. Co. (S. C.)	82
American Spinning Co. (S. C.)	145
Anderson Cotton Mills (S. C.)	80
Arkwright Mills (S. C.)	109
Augusta Factory (Ga.)	85
Avondale Mills (Ala.)	110
Belton Mills (S. C.)	118
Bibb Mfg. Co. (Ga.)	115
Brandon Mills (S. C.)	130
Brogan Mills (S. C.)	45
Cabarrus Cotton Mills (N. C.)	125
Chadwick Mfg. Co. (N. C.) Pfd.	103
Chiquola Mfg. Co. (S. C.)	125
Clifton Mfg. Co. (S. C.)	112
Clifton Mfg. Co. (S. C.) Pfd.	101
Clinton Cotton Mills (S. C.)	155
Columbus Mfg. Co. (Ga.)	94
Courtenay Mfg. Co. (S. C.)	100
Dallas Mfg. Co. (S. C.)	95
Darlington Mfg. Co. (S. C.)	112
D. E. Converse Co. (S. C.)	80
Eagle & Phenix Mills (Ga.)	130
Easley Cotton Mills (S. C.)	145
Enoree Mfg. Co. (S. C.)	70
Enoree Mfg. Co. (S. C.) Pfd.	100
Enterprise Mfg. Co. (Ga.)	82
Exposition Cotton Mills (Ga.)	225
Gaffney Mfg. Co. (S. C.)	85
Gainesville Cotton Mills (Ga.)	60
Gluck Mills (S. C.)	90
Granby Cot. Mills (S. C.) 1st Pfd.	50
Graniteville Mfg. Co. (S. C.)	160
Greenwood Cotton Mills (S. C.)	94
Grendel Mills (S. C.)	118
Hartsville Cotton Mill (S. C.)	122
Henrietta Mills (N. C.)	165
Inman Mills (S. C.)	100
King Mfg. Co. (S. C.)	97
Lancaster Cotton Mills (S. C.)	102
Lancaster Cot. Mills (S. C.) Pfd.	92
Langley Mfg. Co. (S. C.)	92
Laurens Mills (S. C.)	150
Limestone Mills (S. C.)	140
Lockhart Mills (S. C.)	90
Lockhart Mills (S. C.) Pfd.	97
Loray Cotton Mills (N. C.) Pfd.	99
Louise Mills (N. C.)	90
Louise Mills (N. C.) Pfd.	102
Marlboro Cotton Mills (S. C.)	90
Mayo Mills (N. C.)	150
Mills Mfg. Co. (S. C.)	109
Mollohon Mfg. Co. (S. C.)	103
Monaghan Mills (S. C.)	117
Monarch Cotton Mills (S. C.)	107
Newberry Cotton Mills (S. C.)	140
Ninety-Six Cotton Mills (S. C.)	115
Norris Cotton Mills (S. C.)	122
Odell Mfg. Co. (N. C.)	90
Olympia Cotton Mills (S. C.)	70
Orangeburg Mfg. Co. (S. C.) Pfd.	80
Orr Cotton Mills (S. C.)	105
Pacolet Mfg. Co. (S. C.)	170
Pacolet Mfg. Co. (S. C.) Pfd.	104
Pelzer Mfg. Co. (S. C.)	167
Piedmont Mfg. Co. (S. C.)	170
Poe Mfg. Co. F. W. (S. C.)	125
Richland Cot. Mills (S. C.) Pfd.	50
Roanoke Mills (N. C.)	118
Saxon Mills (S. C.)	124
Sibley Mfg. Co. (Ga.)	68
Southern Cotton Mills (N. C.)	62
Spartan Mills (S. C.)	140
Springstein Mills (S. C.)	100
Trion Mfg. Co. (Ga.)	132
Tucapau Mills (S. C.)	195
Union-Buffalo 1st Pfd.	70
Union-Buffalo 2d Pfd.	27
Victor Mfg. Co. (S. C.)	130
Warren Mfg. Co. (S. C.)	90
Warren Mfg. Co. (S. C.) Pfd.	106
Washington Mills (Va.)	25
Washington Mills (Va.) Pfd.	100
Whitney Mfg. Co. (S. C.)	125
Wilkesville Mills (N. C.)	127
Woodruff Cotton Mills (S. C.)	130

American Cotton Oil Report.

The annual report of the American Cotton Oil Co., covering the fiscal year ended August 31, 1907, shows profits for the year \$2,592,262. After the payment of interest on the debenture bonds, amounting to \$225,000, there was left a net profit of \$2,367,262. After the payment of dividends on the preferred stock, amounting to \$611,916, which is at the rate of 6 per cent. per annum, there was a balance of \$1,755,346 carried to the general profit and loss account.

The company has spent \$386,737 for additions to the properties, and there are also factory equipment under contract and water-front improvements at Guttenberg, N. J., amounting to \$161,383, making a total of \$548,121. The sales of real estate,

buildings, old machinery, etc., less deduction, leaves the net increase to the permanent investment account as \$249,033. There was expended for maintenance during the year \$639,121, which is charged to operating expenses. The net working capital at the end of the fiscal year was \$7,415,959. All the properties are free from mortgage or other lien. The total credit to the columns of the profit and loss account is \$8,999,836. The total assets of the company are \$36,898,277.

Chairman Morrison says that under ordinary circumstances the directors would at this time have declared a dividend on the common stock, but in view of the financial conditions now prevailing they consider it to be for the best interest of the stockholders that the cash resources of the company be conserved.

The exports of cottonseed oil during the fiscal year amounted to 801,143 barrels, valued at \$16,720,679, while the exports of cottonseed cake and meal amounted to 679,188 tons, valued at \$17,270,123, making a total value for these two products of \$33,990,802. The domestic consumption largely exceeded these amounts. The uses of cottonseed oil are on the increase.

State banks in Alabama and Mississippi.

A condensed statement of the 284 State banks in Mississippi October 10, 1907, shows loans and discounts, \$44,888,195; cash and sight exchange, \$9,781,046; capital paid in, \$12,450,117; surplus and undivided profits, \$5,112,395; individual and time deposits, \$37,424,559; due other banks, \$646,642; total resources, \$65,463,052.

A condensed statement of the 187 State banks in Alabama at close of business October 15, 1907, shows loans and discounts, \$33,348,571; due from banks and bankers, \$6,714,480; cash, \$3,514,578; capital paid in, \$8,476,750; surplus and undivided profits, \$4,365,783; due to banks and bankers, \$2,121,059; deposits, \$30,785,838; total resources, \$49,655,424.

New Corporations.

Local business men are reported to be organizing a bank at Ward, S. C.

The National Savings & Trust Co. is reported being organized at Chattanooga, Tenn., with \$100,000 capital.

The Citizens' Bank of Mt. Olive, N. C., has been chartered with \$15,000 capital by J. D. Kelley, R. D. Sutherland and others.

The People's Bank of Woodruff, S. C., has been incorporated with \$50,000 capital by L. W. Seay, S. M. Pilgrim and others.

The People's Bank of Leesville, S. C., capital \$30,000, has organized with E. J. Etheredge, president, and W. A. Shealey, secretary and treasurer.

The Texas Bank & Trust Co., capital \$500,000, has been organized at Dallas, Texas, with J. O. Teagarden, president, and R. W. Wright, cashier.

The Planters and Merchants' Bank of Varville, S. C., capital \$15,000, has been organized with W. E. R. Charsson, president, and W. V. Bowders, cashier.

The Union Savings Bank of Greenville, S. C., has been incorporated with \$10,000 capital by Marshall Moore, Stephen King, Frank Pearson and T. F. Jamison.

The Bluestone Realty & Insurance Corporation has been incorporated at Graham, Va., with \$15,000 capital. B. F. Stafford is president and general manager.

The Merchants and Farmers' Bank of Eupora, Miss., has been incorporated with \$40,000 capital by T. F. Taylor, J. T. Marshall, W. D. Evans and others.

The Bank of Weston at Weston, W. Va., has filed its charter; capital \$60,000. The incorporators are W. A., T. A., M. O. and L. G. Edwards and Porter Arnold.

The First National Bank of Covington, Ga., capital \$40,000, will, it is reported, soon begin business with Dr. N. Z. Anderson as president and Clarence Terrell cashier.

The Maysville Banking & Trust Co. of Maysville, N. C., has been incorporated with \$25,000 capital by Geo. B. Pendleton, T. A. Green and James Redmond, all of Newbern.

The Alabama Bank & Trust Co. of Montgomery, Ala., has begun business with \$300,000 capital. J. L. Hall is president, W. F. Vandiver vice-president and R. Seibels cashier.

The Southern Life & Accident Insurance Co. of Marianna, Fla., has been incorporated with \$50,000 capital. V. H. Milton is president and John Milton secretary and treasurer.

The State Bank of Oney, O. T., capital \$10,000, has been incorporated by Morris L. Hite of Anadarko, Boone D. Hite and Ormsby M. Hite of Fort Cobb, Virginia A. Menefee of Carnegie.

The Bank of Speedwell has been organized at Speedwell, Va., with \$10,000 capital. The incorporators are S. S. Simmerman, president; A. L. Porter, vice-president; C. E. Lundy, cashier.

The Citizens' Bank of Polk county is reported chartered at Benton, Tenn., with \$10,000 capital by M. C. King, J. A. Gilliam, Boon Crawford, Dr. W. Y. Gilliam, F. M. Jones and W. D. Hawkins.

The Citizens' National Bank of Washington, Ga., capital \$50,000, is to begin business about November 15 with R. O. Barksdale, president; C. E. Irvin, vice-president, and Alexander Irvin, cashier.

The People's Dime Savings Bank and Trust Association of Staunton, Va., has been incorporated with \$500 to \$10,000 capital by Samuel Linday, president; C. F. Points, vice-president, and T. E. Jackson, cashier.

The Nashville Investment Co. of Nashville, Tenn., has made application for a charter; capital \$50,000. The incorporators are A. S. Williams, D. B. Blakemore, S. D. Cowden, Price H. Sudekum, J. E. Justice and F. A. Gear.

The Arkansas Investment & Loan Co. of Fort Smith, Ark., has been incorporated with \$500,000 capital by Rudolph May, president; I. S. Lowery, vice-president; W. F. Blocker, secretary; W. L. Warner, treasurer, and others.

The Jackson County Trust Co. of Bridgeport, Ala., has filed its charter; capital \$300,000. The incorporators are Rudolph Shellheimer, Clarence J. Ward, Chas. H. Currens, E. S. Brodix, W. I. Wellman, Milton Humes, Frank Damron and A. A. Lesner.

The Farmers' Union Bank at Jackson, Miss., has filed its charter; capital \$500,000. The incorporators are J. M. Bass, Hazlehurst; J. W. Day, Crystal Springs; C. I. Allen, G. W. Russell, Hazlehurst; W. W. Welch, Rara Avis; M. A. Brown, Yazoo City; H. W. Bradshaw, Moseley; H. E. Blakeslee and others.

The Home Builder Permanent Savings and Loan Association has been incorporated at Baltimore, Md., with an authorized capital of \$2,600,00

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